Professional roles and identity in public mental health services: the multifaceted interaction of belonging, attachment, power and activities.

by

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Statements and Declarations

Declaration of Originality

This thesis contains no material which has been accepted for a degree or diploma by the university or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

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Statement regarding published work contained in this thesis

At the time of submission, the content of Chapter 2 has been published. Other than Chapter 2 no other part of this thesis has been published in any form.

25 February 2019

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Lila Petar Vrklevski Date

Dedication

This dissertation is dedicated to my grandmother, Vasa. She was orphaned at the age of seven and her education was disrupted by war, poverty and lack of opportunity.

Acknowledgements

An undertaking of this size cannot be completed without assistance. Many people have been instrumental in the completion of this research. First, I would like to acknowledge the support and opportunity provided by Dr Teresa Anderson, Chief Executive of the Sydney Local Health District (SLHD). Her vision and generosity has provided me with this opportunity to undertake formal training and research in management.

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hours, fed me chocolate and made me remember that life rolls on with hilarious stories about her family. Without Kathy's support and unwavering belief in my skills, the experience would have been considerably more difficult. I am in awe of her talents and indebted to her for everything, even though she nearly "broke me." She was the person that kept doubt at bay.

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Preface

Working as a clinical psychologist for the greater part of my career, has been a tremendously enriching and engaging experience. I have loved working with various patients and consumers, learning infinitely more from them than the obligatory reading in my undergraduate and post-graduate studies. I have been able to track the development of my profession over the last 25 years and witness first-hand the growing popularity of psychology as a university course and profession. I have seen the increased number of graduates. I have rejoiced at the legitimacy and the higher public profile enjoyed by the profession. The reason I chose to do a dissertation on "What is the role of allied health in the future of public mental health services?" is that I was reflecting on the changes that I have witnessed in psychology and the role of psychologists in public health.

As a new graduate psychologist in the early 1990's my first job was on a community mental health team at Bowral & District Hospital and Community Health Services. I recall the mixture of excitement and fear that I felt as I presented for work on my first morning. I had purchased a pair of navy blue Country Road pants teamed with a white Sportsgirl shirt for my first day of work as a young professional. My mother had bought these items for me, as well as a new leather handbag and shoes. Strangely, I kept that pair of pants for several years, as a reminder of that day, even when I knew with absolute certainty I would never wear them again. In my eagerness to start my career and create a positive impression with my employer I made certain to arrive at least 15 minutes earlier than my official start time. I greeted the receptionist, Marilyn, with a cheerful "Good Morning" only to be met with a somewhat cool look and a rather frosty "Good Morning." I felt a little deflated by such an inauspicious start and determined that I would make more of an effort to gain Marilyn's approval. My first day disappeared in a whirlwind of new names, faces and endless forms. The staff identity card around my neck made me official. I went home that evening tired but satisfied that I would enjoy working there.

The following morning I arrived for work 15 minutes early again and greeted Marilyn with my customary, cheerful "Good Morning." I even attempted to engage her in conversation but she was having none of that and responded to my chatter with an even frostier "Good Morning" and a reproachful look. I was puzzled. I had barely set foot in the organisation and I had apparently done something offensive. Putting my scientist-practitioner skills to use, I decided to observe Marilyn with other colleagues and noted she was warm, welcoming and

genuinely helpful. I became even more puzzled about what I may have done to incur her censure. Marilyn's approval mattered not only because she was the gatekeeper to the service and the manager's eyes and ears but also because I was genuinely perturbed about her growing coldness towards me.

The third morning followed a similar pattern to the previous two except that the frostiness in Marilyn's voice had turned to ice and the look of reproach had become a look of accusation. I also noticed the same looks from the community health nurses as I greeted them. The slight puzzlement I had experienced gave way to nagging worry and I asked myself "What rule have I unintentionally breached and how do I remedy this?"

I asked the Clinical Nurse Consultant (CNC), a mature, pragmatic, French nurse who had been working in the service for over 20 years for advice. Her response was "Lil, you have come to work late every morning." I was dumbfounded because the starting time on my letter of appointment was 9.00 a.m. and I had diligently presented for work at 8.45 a.m. every morning. I showed her the letter of appointment. It was obvious a misunderstanding had occurred but no one had thought to talk to me. She later had a quiet word to Marilyn and showed her the letter.

All was forgiven and when I presented to work on the following morning, Marilyn literally beamed at me. I was invited to morning tea, embraced within the bosom of the community nurses and we all laughed about the misunderstanding. From that moment on, Marilyn became one of my staunchest allies and supports. Whenever I needed stationery, information or assistance, Marilyn would rally. I still have very fond memories of my time there and of the various colleagues who helped me settle into my new role and develop my professional identity. They helped me succeed.

The position allowed me to apply all the knowledge I had acquired at university to real people with real difficulties. I was no longer practising my skills on first year undergraduate psychology students. It was exhilarating and overwhelming. I was the only psychologist on the community mental health team that consisted of a consultant psychiatrist, a very, intelligent and dedicated, yet somewhat eccentric woman, a CNC, the mature French nurse; a psychiatric nurse, social worker and occupational therapist. The work I did consisted of assessment; formulation; treatment and evaluation at an individual and group level. Additionally I conducted neurocognitive assessments. The work was varied, never dull and kept my anxiety levels hovering in the moderate to high range.

It was satisfying and challenging work covering a broad range of mental health presentations from anxiety, mood and personality disorders; to psychosis and substance use, as well as stress management for the ambulance and police services. Apart from the normal anxiety experienced by all new practitioners, I *felt* like a real psychologist and I could see that my role was different to my colleagues on the mental health team. Clearly, we all had to complete some tasks. These were statistics, the community living skills group, documentation and other group programs. However, the majority of my days would be spent delivering targeted psychological interventions to members of the community with mental health difficulties. There was no rebate for psychological services under Medicare at the time.

I left community mental health after a few years to work in other areas namely, The University of Technology Sydney (UTS), Corrective Services and Sexual Assault. I spent a few years as a criminal lawyer and returned to mental health in 2008 as the Professional Senior for Psychology, in the Sydney South West Area Health Service. About 16 years had passed and I had returned to my professional roots. I saw and heard from colleagues that the distinct roles occupied by the professional groups when I first commenced work in community mental health had blurred. The boundaries between nursing, occupational therapy, psychology and social work had morphed into an entity described in job descriptions as "case manager" or "care co-ordinator." I noted the sense of dissatisfaction among my colleagues and began to wonder how this affected professional identity. The literature I read used terms such as "blurred boundaries" and "creeping genericism" in describing the changes to the public sector community mental health workforce. Some of the literature indicated clinicians were dissatisfied with being case managers or care-coordinators because they felt deskilled and not able to fully utilise their discipline specific skills. Certainly many colleagues across the state voiced their dissatisfaction and fear of becoming generic mental health workers.

This made me consider whether nurses, occupational therapists, psychologists and social workers in inpatient services felt the same. Was there a difference in the role of these professional groups between inpatient and community mental health services? I also became curious about professional identity: how it is formed, shaped, influenced and developed. I wondered whether clinicians whose role utilised more discipline specific skills had a stronger professional identity. I also wondered whether the blurring of professional boundaries had an impact on strength of professional identity. From these initial observations and thoughts, the

idea for this dissertation began to form and my trepidation about wandering into unchartered and unexplored territory began to diminish as excitement slowly took hold.

The PhD experience can be lonely. The commitment to this dissertation has at times waxed and waned. It has been supplanted with anxiety, dread, and sheer exhaustion but the need to explore these questions and arrive at answers has driven me forward. Research involves exposing oneself to possibilities, trials and challenges. In the words of B.F. Skinner, the founding father of behaviourism in psychology: "Education survives when what has been learnt has been forgotten" (1904-1990). This dissertation is a testament to my commitment and passion for education - a passion that continues to endure.

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Abstract

Deinstitutionalisation of the mentally ill formally commenced in Australia in 1992. People with mental illness were discharged into the community in great numbers. Consumers of public mental health services are a complex and challenging cohort. These consumers require assistance in psychiatric, psychological, relationships, accommodation, psychosocial, vocational, and legal domains. This called for new models of care and different work practices for mental health clinicians. Case management and multi-graded positions were implemented. Multi-graded positions on community mental health teams have led to blurred boundaries and role overlap between psychiatry, nursing and allied health professionals. Blurred boundaries can result in role conflict between professions, as well as a loss of professional identity and feelings of disempowerment.

This study addressed the question: what is the role of allied health in the future of public mental health services? In examining this question, this research explored two intertwined issues. First, the impact of Mental Health Service (MHS) multi-graded positions on the strength of professional identity, perceptions of power across disciplines, and the perceived impact this has on patient care was considered. Second, the study investigated whether public mental health services are meeting the needs of consumers. Specifically, the study identified which needs are being met, which needs are not being met and what activities and skills are required to meet these needs.

A unique contribution of this research has been the theoretical development and testing of a new and robust model of professional identity. The four-factor model, called the *Four Factor Model of Professional Identity (4FM-PI),* recognises professional identity is a multi-factorial and multi-dimensional construct. The four factors that contribute to strength of professional identity are; belonging (tribal theory), attachment (role theory), power (organisational hierarchy) and activities (discipline specific and generic).

The setting was a large metropolitan MHS comprised of three inpatient facilities with 270 inpatient beds. There is a 12-bed step-up, step-down unit based in the community to assist with transitioning to or from inpatient care. About 3000 people receive inpatient care annually. There are also five community mental health centres that provide over 128,000 non-admitted occasions of service for more than 14,000 people. The MHS is staffed by about 700 clinicians. Participants were drawn from the five largest disciplines - nursing, occupational therapy, psychiatry, psychology and social work. A mixed methods design was employed.

An on-line survey was administered and consisted of four psychometric measures: the Demographic Data Questionnaire (DDQ), the purpose – designed and empirically derived Mental Health Activities Checklist (MHAC), Professional Identity Scale (PIS) and Power Questionnaire (POWQ). Data was analysed using inferential statistics. In addition, semi-structured interviews were conducted. Hour-long interviews were held asking participants: to describe their role; which professional group they were most and least similar to; how role clarity can be achieved; if the needs of consumers are being met; and, in the future, what is required to meet the needs of consumers. Interviews were transcribed and thematically analysed.

Across the five professions, 320 staff elected to complete the survey, for a 44% response rate. The average PIS scores for each discipline were Social work (PIS= 4.40), Psychology (PIS= 4.48), Occupational Therapy (PIS= 4.54), Nursing (PIS= 4.58) and Psychiatry (PIS= 4.62). Even though psychiatrists reported the highest average PIS score the difference between disciplines on strength of professional identity was not statistically significant ($p=0.69$). There was a weak positive correlation ($r=0.230$, $n=320$, $p <.0001$) between PIS and time spent on discipline specific activities (MHAC). There was a weak positive correlation ($r=0.359$, $n=320$, $p <.0001$) between PIS and Power. Even though inpatient staff had higher average PIS ($\mu=45.77$) and Power ($\mu=4.11$) scores than community staff, PIS ($\mu=44.80$) and Power ($\mu=3.98$) the differences were not statistically significant.

There were 20 semi-structured interviews conducted. Ten staff members from both inpatient and community services participated, with four from each of the five professional groups. The questions in the semi-structured interview were designed to allow participants to describe their experience of working in the mental health service alongside other professional groups.

The investigation confirmed role overlap between psychiatry, nursing and allied health is beneficial and enables a shared understanding. Mental health professionals need skills and abilities that are varied, similar, flexible and adaptable. However, multi-graded or generic positions can limit the ability of the team to address the full range of consumer needs. Empirical testing confirmed the theoretically derived 4FM-PI model of professional identity. Belonging, attachment, power and activities interrelate and reinforce to shape perceptions, attitudes and practices of one's own and other professions. This is a new and unique contribution to the empirical knowledge base.

The study confirmed that the service was meeting consumer needs across three domains. The first domain was in psychiatric intervention: consumers were provided with medication, and regular psychiatric reviews. The second domain was housing: consumers were found accommodation despite shortages of suitable low-cost housing. The third domain was in adherence to legislative and regulatory standards in the delivery of care: consumers were managed appropriately under relevant legislation. The study found that there was a range of needs across medical and social dimensions the service was not meeting. These needs were predominantly in the area of psychological and psychosocial interventions.

To address these unmet needs, the study identified that discipline specific allied health skills are required now and into the future. Alternative models to care coordination could and should be explored to address the unmet needs in the psychological and psychosocial domains. In summary, future services needed to offer more holistic mental healthcare provided by professionals with discipline specific skills and focus.

Glossary of Acronyms

AHPRA	Australian Health Practitioners Regulation Agency
AIHW	Australian Institute of Health and Welfare
ALOS	Average Length of Stay
AMA	Australian Medical Association
CBT	Cognitive Behavioural Therapy
CCMH	Concord Centre for Mental Health
CE	Chief Executive
CD	Clinical Director
CHC	Community Health Centre
CHOC	Community Health and Outpatient Care (Records)
CMHS	Community Mental Health Service
CTO	Community Treatment Order
CRGH	Concord Repatriation General Hospital
DBT	Dialectical Behavior Therapy
ECT	Electroconvulsive Therapy
ED	Emergency Department
eMR	Electronic Medical Record
FIFO	Fly In Fly Out
HOD	Head of Department
KPI	Key Performance Indicator
LHD	Local Health District
LGA	Local Government Area
LHN	Local Health Network
MDT	Multidisciplinary team
MHA (2007)	Mental Health Act 2007
MHAC	Mental Health Activities Checklist
MHS	Mental Health Service
MHOAT	Mental Health Outcome and Assessment Tools
MI	Motivational Interviewing
NUM	Nurse Unit Manager
NAPOOS	Non-admitted Patient Occasion of Service

OOS	Occasion of Service
OT	Occupational Therapist
PIS	Professional Identity Scale
POWQ	Power Questionnaire
SLHD	Sydney Local Health District
SRA	Self-Reflective Awareness
SW	Social Worker

Glossary of Terms

Term	Description
Accredited Person	The role of accredited person was initially introduced in NSW in 2003 (NSW Health 2017). It enabled experienced mental health clinicians to make an initial decision about a person's need for involuntary admission under the NSW Mental Health Act 2007. Before the introduction of this role, only doctors could make this decision.
Alienists	These early physicians only treated patients with mental illness. They did not treat any other patients.
Allied Health	The term allied health was coined in the 1990s. It is an umbrella term that is used to represent various health disciplines excluding doctors and nurses. The impetus to use this term was driven by a need for greater autonomy and influence for allied health disciplines in strategic leadership and integration with the health system (Australian Government 2013).
Burdekin Report 1993	Brian Burdekin was the Human Rights and Equal Opportunity Commissioner responsible for the *National Inquiry into the Human Rights of People with Mental Illness. The Burdekin Report* (1993) exposed the abuses suffered by mentally ill patients in Australian psychiatric institutions.
Care Coordinator	A generic or multi-graded position based on community mental health teams.
Case Manager	A generic or multi-graded position based on community mental health teams. Case manager has been replaced by the term, care coordinator in response to calls from the consumer movement that people with mental illness are not cases that need to be managed.
Cerner	NSW Health database used for recording appointments and clinical activity.
Consumer	The term used by patients of public mental health services to

Term	Description
	describe themselves.
Deinstitutionalisation	Deinstitutionalisation of the mentally ill formally commenced in Australia in 1992. Institutionalised treatment of people with mental illness was replaced with community based models of care.
Deprofessionalisation	This occurs when professional groups lose their unique skills and monopoly over knowledge.
Dirty Work	The division of labour where a professional group with high standing retains work it perceives as desirable and discards work viewed as undesirable to others (Hughes 1958).
Discipline Specific Skills	These activities can only be performed by one professional group or are perceived as being in the domain of one professional group.
Diversification	Diversification occurs when a professional group expands its scope of practice by identifying a new method or approach to practice that is not the domain of another professional group.
Generic skills	Activities that can be performed by several or all professional groups.
Homophily	Contact between similar people that occurs with greater frequency than contact between dissimilar people (McPherson, Smith-Lovin & Cook 2001, p.416).
Horizontal Substitution	Horizontal substitution occurs when clinicians from different professional groups with similar skills start performing activities normally perceived to be the domain of another professional group.
Interdisciplinary	There are two types of teams in mental health services, interdisciplinary and multidisciplinary teams (Harrison 2003, p.111). Interdisciplinary teams combine separate disciplines onto one team. Each team member serves as a specialist and spends the majority of their time delivering discipline specific interventions. Each team member provides a discipline specific perspective to assessment and discipline specific skills to

Term	Description
	treatment. The interdisciplinary model is followed on inpatient mental health units and in general hospitals (Harrison 2003).
Lobotomy	Lobotomies involve surgery to the cortical structures in the brain. They were used to manage highly agitated patients.
Multidisciplinary	Multidisciplinary teams require all clinicians to take on generic roles. Each patient is assigned a case manager or care coordinator who is responsible for providing all the services necessary for that individual's care. Community mental health services follow a multidisciplinary model (Harrison 2003).
Multi-graded Positions	These are positions that have been graded by a grading committee in NSW Health as capable of being performed by several professional groups.
Power	Power is defined as "the ability of those who possess power to bring about the outcomes they desire" (Mitchell et al. 1997, p.865). More specifically power is also professional dominance according to Freidson (1970a). It is the authority to direct the work of other professional groups while concomitantly, not having your professional group's work overseen by other professions. This epitomises the position of doctors vis a vis other healthcare professions (Freidson 1970a).
Powerchart	NSW Health electronic medical records also known as eMR.
Saliency	Saliency is defined as "a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Mitchell et al. 1997, p.865).
Urgency	Urgency is defined as "the degree to which stakeholder claims call for immediate attention" (Mitchell et al. 1997, p.867) and is comprised of two components, time sensitivity and criticality.
Psychotropic	These medications affect mental activity, behaviour, or perception. They are mood-altering drugs.
Professional Boundary	Boundaries are invisible borders that define the scope of professional relationships. Boundaries are determined by

Term	Description
	legislation, ethics, and professional standards. They also define the scope of practice for each discipline (Cregard 2018).
Proletarianism	The term used to describe the decline of medical power (Nancarrow & Borthwick 2005).
Richmond Report 1983	The Richmond Report (1983) argued for the deinstitutionalisation of people with mental illness and exposed the abuses perpetrated against them in various institutions. D.T. Richmond was Chairperson of the NSW Inquiry into Health Services for the Psychiatrically Ill and Developmentally Disabled. He championed the rights of the mentally ill to live in the community.
Specialisation	Specialisation is the acquisition of expert knowledge and skills in a specific disciplinary area. Specialist boundaries are protected by the use of special titles and exclusive membership to a subgroup of the profession. Specialisation bestows greater prestige and power to select members of a professional group (Nancarrow & Borthwick 2005).
Stratification	Stratification is defined as a hierarchy between the different specialist areas within a discipline. Stratification helps protect intra-disciplinary boundaries.
Territoriality	A territory is defined as a space that has been identified by an individual, or tribe as its exclusive property, and is defended against any threat from others (Baldwin 2007).
Vertical Substitution	Vertical substitution occurs when clinicians from one professional group adopt the skills and activities of another professional group perceived to have greater expertise and prestige (Nancarrow & Borthwick 2005).

Academic Recognition for the Research

Awards

1. Vrklevski, L.P. (2018) CRGH 2018 Conference Travel Grants: To attend *ISQua's 35th International Conference*, Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia, 23-26 September 2018.
2. Vrklevski, L.P. (2017): Best abstract at *SLHD Allied Health Research Forum*, Medical Education Centre, Concord Hospital, Concord, NSW, 1 December 2017.
3. Vrklevski, L.P. (2017) CRGH 2017 Conference Travel Grants: To attend *10th Health Services and Policy Research Conference*, HSRAANZ, Gold Coast, Queensland. 1-3 November 2017.
4. Vrklevski, L.P. (2017) HSRAANZ Bursary: To attend *10th Health Services and Policy Research Conference*, HSRAANZ, Gold Coast, Queensland, 1-3 November 2017.
5. Vrklevski, L.P. (2015) *SLHD Allied Health Seeding Grants*, Awarded at SLHD Allied Health Research Forum, Kerry Packer Education Centre, RPAH, Sydney, 1 December 2015.

Peer Reviewed Journal Articles

1. Vrklevski, L. P., Eljiz, K. and Greenfield, D. (2017). The evolution and devolution of mental health services in Australia. *Inquiries Journal, 9, 10-22.* http://www.inquiriesjournal.com/a?id=1654

Invited Talks

1. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). Cooperation, conflict and care: investigating professional roles, identity, power and patient care in mental health services. *Canberra Health Services Executive*, Canberra, ACT, Australia, 9 November.
2. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). Is professional identity important? Preparing postgraduate psychology students for workforce challenges. *Anxiety Practitioners Network (APN)*, Sydney, Australia, 3 November.
3. Vrklevski, L., Eljiz, K. and Greenfield, D. (2018). What is so important about professional identity? *UNSW Clinical Psychology Program*, UNSW Randwick, NSW, Australia, 1 November.

4. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2017). Cooperation, conflict and care: investigating professional roles, identity, power and patient care in mental health services. *Canberra Mental Health, Justice Health and Drug Health Services*, Canberra, ACT, Australia, 10 November.
5. Vrklevski, L., Eljiz, K. and Greenfield, D. (2017). Professional identity and psychologists. *UNSW Clinical Psychology Program*, UNSW Randwick, NSW, Australia, 19 October.
6. Vrklevski, L., Eljiz, K. and Greenfield, D. (2017). Professional identity, power and patient care. *Professor Marie Bashir Centre Grand Rounds*, RPAH, Camperdown, NSW, 13 September.
7. Vrklevski, L., Eljiz, K. and Greenfield, D. (2017). Organisational agenda's or consumer needs: problems of professional identity and power emerging from the blurring of clinical roles. *University of Tasmania Research Week: Celebrating Research Excellence*, Sydney, Australia, 5 September.

Presentations

1. Vrklevski, L., Eljiz, K. and Greenfield, D. (2017). Understanding the evolution of faultlines in Mental Health Service Professional Groups. *ANZAM Health Management and Organisation Special Interest Group*, Western Sydney University (WSU), Parramatta CBD Campus, NSW, 19 July.
2. Vrklevski, L., Eljiz, K. and Greenfield, D. (2016). What is the role of allied health in the future of the public mental health service? *Concord Hospital Grand Rounds*, Sydney, Australia, 5 July.
3. Vrklevski, L., Eljiz, K. and Martin, A. (2015). What is the role of allied health in the future of the public mental health service? *Concord Hospital 3 Minute Thesis Challenge*, Sydney, Australia, 21 October.
4. Vrklevski, L. and Eljiz, K. (2015). What is the role of allied health in the future of the public mental health service? *University of Tasmania Three-Minute Thesis Presentation*, UTAS, Hobart, Australia, 12 May.

Peer Reviewed Abstracts

1. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). Are public mental health services meeting the needs of consumers? *Australian Psychological Society Congress*, Sydney Convention Centre, NSW, 27-30 September.

2. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). The impact of multi-graded positions on professional identity, power and patient care in mental health services. *Australian Psychological Society Congress*, Sydney Convention Centre, NSW, 27-30 September.
3. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). The domino effect: the unintentional consequences of multi-graded positions in mental health services. *ISQua's 35th International conference: Heads, hearts and hands: weaving the fabric of quality and safety,* International Society for Quality in Healthcare, Kuala Lumpur, Malaysia, 23-26 September.
4. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2018). Varied, flexible and adaptable: investigating professional roles, identity, power and patient care in mental health services. *4th International Healthcare Reform Conference*, Intercontinental Sydney, Double Bay, 21 - 23 March.
5. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2017). Cooperation, conflict and care: investigating professional roles, identity, power and patient care in mental health services. *SLHD Allied Health Research Forum*, Concord Hospital, Concord, NSW, 1 December.
6. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2017). Are public mental health services meeting the needs of consumers? *10th Annual Health Services & Policy Research Conference*, HSRAANZ, Gold Coast, Queensland, 1-3 November.
7. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2017). What makes consumers and mental health services stronger? A resilient, killed mental health workforce that works together. *12th National Allied Health Conference*, ICC Sydney Australia, 26-29 August.
8. Vrklevski, L.P., Eljiz, K. and Greenfield, D. (2017). Varied, flexible and adaptable: mental health professional roles to better meet the needs of consumers. *SLHD Mental Health Symposium, Concord Hospital*, Concord, NSW, 11 August.

1. Introduction

1.1 Background to Research

This chapter addresses the background to the study and introduces the research questions and hypotheses. The chapter consists of twelve parts. The first part provides a background to the research. The second part provides a brief description of the Australian health system. The third part describes the study setting, the Sydney Local Health District (SLHD) and the mental health service. The fourth part is a statement of the problem. The fifth part consists of a brief overview of the study rationale. The sixth part describes previous research in this area. The seventh part introduces the overarching research question, eight sub-questions and three hypotheses. The seventh part describes the unique contribution of this research to the theoretical and empirical literature. The eighth part presents the theoretical context and the ninth part defines the scope of the study. The tenth part provides a brief overview of the research methodology and the eleventh part an outline of each chapter of this thesis. The last part provides a brief summary of the chapter.

Over the last three decades, mental health services in Australia and overseas have moved away from institutionalised care of individuals diagnosed with mental illness (Grace et al. 2017; Lloyd, King & McKenna 2004; McGorry, Bates & Birchwood 2013; Rosenberg 2017). Care of this population is now provided mainly in the community (Rosenberg 2017; Sanborn 2014). This shift called for changes to the models of care and work practices for staff employed in public mental health services (Brown, Crawford & Darongkamas 2001; Lloyd, King & McKenna 2004; Slade 2017). New models of community based care have contributed to a blurring of the roles between the five largest professional groups in the public mental health service: (1) nursing, (2) occupational therapy, (3) psychiatry, (4) psychology, and (5) social work (Hercelinskyj et al. 2014). Throughout this thesis, the terms professional groups, disciplines, clinical groups and occupational groups have been used interchangeably. Individuals that access mental healthcare are referred to as both patients and consumers.

Deinstitutionalisation of mentally ill patients formally commenced in Australia in 1992 and called for community based models of care (Bircanin & Short 1995). The impetus for this was driven by a combination of social, economic, political, legal, medical and pharmacological developments. A comprehensive analysis of all these developments is beyond the scope of this thesis but their impact needs to be acknowledged. Several inquiries,

including the Richmond Report (1983) and Burdekin Report (1993), exposed the abuses perpetrated against mentally ill patients in institutional care. This prompted the Australian Federal Government to implement a series of reforms under the Australian National Mental Health Strategy (NMHS) (Grace et al. 2017). The largest of these reforms resulted in movement towards community based treatment of those with mental illness combined with brief hospitalisations in acute inpatient units (AIHW 2012).

Community based models of care have introduced generic models of care and generic terms when recruiting for staff. Some of these terms include mental health clinician or mental health worker, case manager and care coordinator. Positions on community mental health teams have been multi-graded and advertised as nurse/ occupational therapist/ psychologist/ social worker. Position descriptions have been genericised. This has resulted in a blurring of the roles between nurses, occupational therapists, psychologists and social workers (Maddock 2015; Stets & Burke 2000). The roles between these four professional groups have historically been more clearly differentiated on inpatient units than on community mental health teams (Norman & Peck 1999; Peck & Norman 1999). The blurring of roles between these four professional groups need to be understood within the context of the Australian health system.

1.2 The Australian Health System

Australia operates under a federated health system (AIHW 2016). Under this system federal, state, territory, and local governments share responsibility and funding for the delivery of health services. A large and complex network of government and non-government organisations work together to regulate, govern and deliver health services. The role of the federal, state and local governments in the delivery of health services is provided in Figure 1.1. Spending for health services in 2013-2014 was over $155 billion (AIHW 2016). This figure is rising and is likely to continue to do so (AIHW 2016). Figure 1.2 presents the breakdown of health services funding.

Although public hospitals are managed by State and Territory governments, they are funded by a combination of federal and state revenue. In 2014, there were 747 public hospitals across Australia. Spending on public hospitals was $45.7 billion, which accounted for 31% of the total health budget. Private hospitals are licenced and regulated by state and territory governments even though they are privately owned. In 2014, there were 612 private hospitals across Australia. In addition to funding hospitals, the Federal, State and Territory

governments also fund and deliver medical research, population health programs, public–based community health services (such as *mental health*, dental health and drug and alcohol services) and health services for Aboriginal and Torres Strait Islander communities.

Each state and territory is organised into local health networks (LHNs). The LHNs manage public hospital and community health services. There are 135 LHNs in Australia (AIHW 2016). The aim of creating LHNs was to decentralise public hospital management and increase local accountability (Anderson & Catchlove 2012).

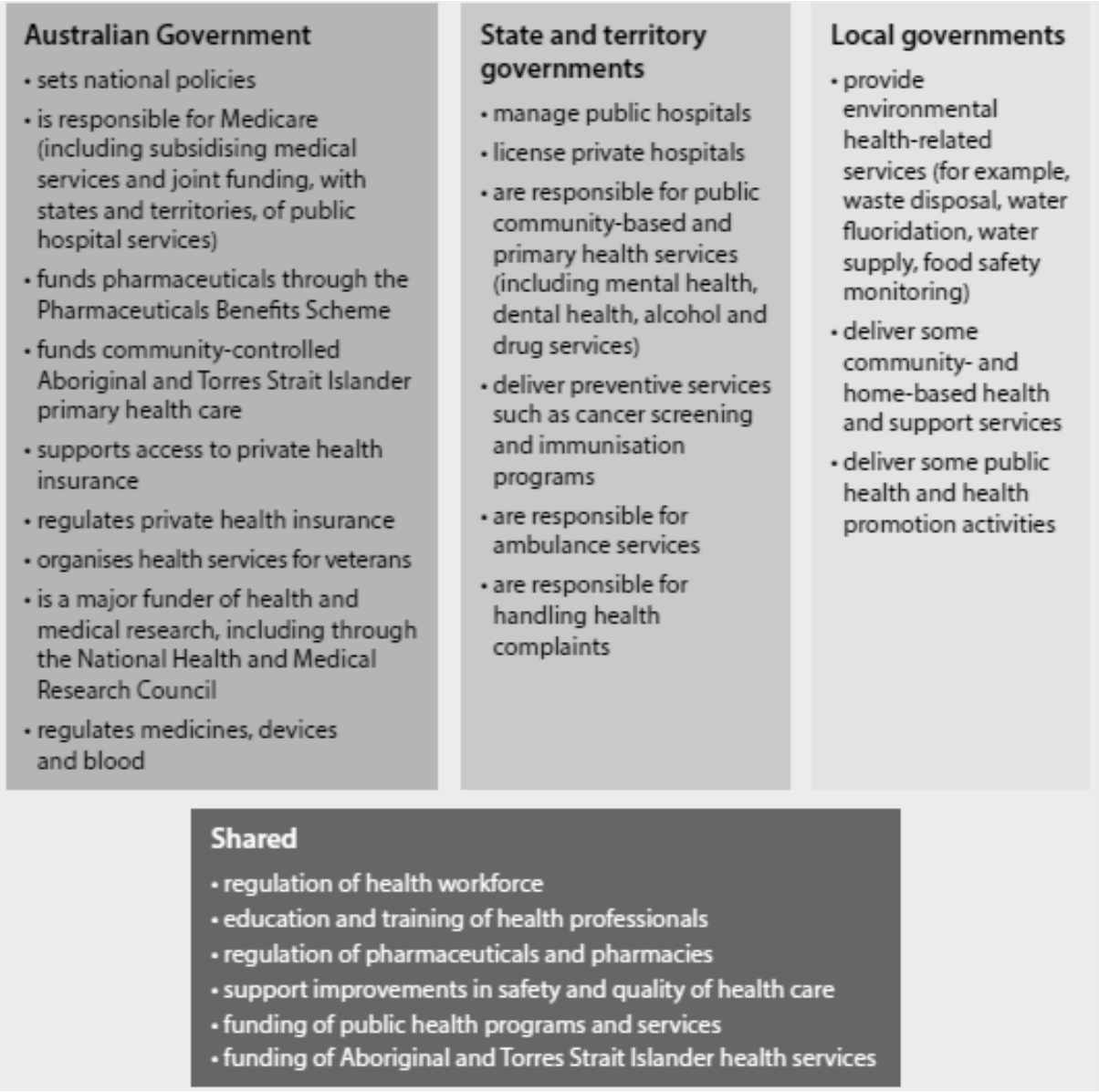


Figure 1. 1**:** Main roles of government in Australia's health system

Source: AIHW (2016, p. 3)

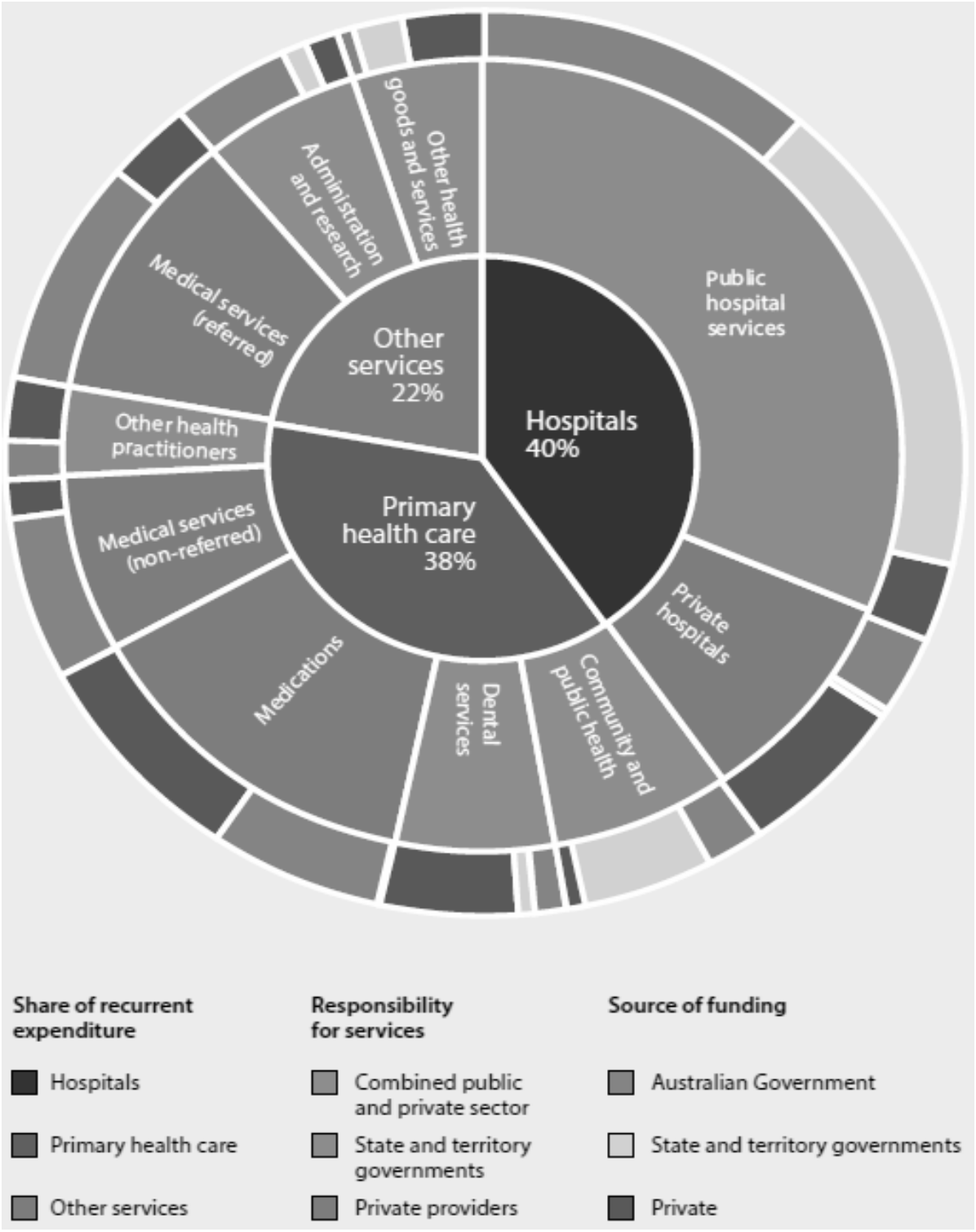


Figure 1. 2**:** Health services funding

Source: AIHW (2016, p. 5)

The LHNs performance is measured against a number of key performance indicators (KPIs). The LHNs in New South Wales (NSW) are known as Local Health Districts (LHDs). They are referred to as LHNs in South Australia, as Hospital and Health Services in Queensland and Tasmanian Health Organisations in Tasmania (AIHW 2016). Despite these different names, they have the same responsibilities.

NSW was the first state to introduce LHNs in mid-2010 (Anderson & Catchlove 2012). On 1 January 2011, NSW reorganised eight large area health services into 15 LHDs. Eight LHDs cover the Sydney metropolitan region and seven cover rural and regional NSW. In addition, two specialist networks provide forensic mental health, justice health, and paediatric services. A third network comprised of St Vincent's Hospital, the Sacred Heart Hospice at Darlinghurst and St Joseph's at Auburn provides public healthcare (NSW Ministry of Health 2017).

1.3 The Sydney Local Health District: The Study Setting

The Sydney Local Health District (SLHD), which is the focus of this thesis, covers approximately 127 square kilometres and has a population of over 640,000 people. By 2026, the SLHD population is expected to reach 728,319 people. SLHD has a large culturally and linguistically diverse community with over 52% of residents speaking a community language at home. The most commonly spoken languages are Mandarin, Cantonese, Arabic and Greek. The SLHD is also home to many residents who identify as Aboriginal. SLHD is comprised of eight Local Government Areas (LGAs) including City of Sydney, Leichhardt, Marrickville, Ashfield, Burwood, Strathfield, Canada Bay and Canterbury. Each of these LGAs contributes to the provision of healthcare services (SLHD 2017).

The SLHD mental health service is comprised of three inpatient facilities. The Concord Centre for Mental Health (CCMH) is a 180 bed-inpatient facility, the Professor Marie Bashir Centre (PMBC) has 73 beds and Thomas Walker (Rivendell Adolescent Unit) has 20 inpatient beds. Additionally there is a 12 bed step-up, step-down unit based in the community to assist with transitioning to or from inpatient care. There are also five community mental health centres at Camperdown, Canterbury, Croydon, Marrickville and Redfern. All of these inpatient facilities and community health centres were the focus of this thesis.

Demands on public mental health services are very high. Mental health services across Australia provided 1.8 million inpatient episodes of care and recorded 2.65 million emergency department attendances in 2013-2014. These figures increase by about 3% each year (NSW Health Annual Report 2016-2017). The SLHD mental health service admitted

3000 people and provided 74,765 days of care in 2016. Community mental health services provided over 128,000 non-admitted occasions of service for more than 14,000 people (SLHD Mental Health Service Strategic Plan 2015-2019).

1.3.1 Consumers of the SLHD Mental Health Service

A pilot study was undertaken to determine whether consumers of the SLHD mental health service were representative of consumers of public mental health services across Australia (Appendices 1-3). The profile of consumers being cared for by the SLHD mental health service matched the profile of consumers nationally. The needs identified in the care of consumers in the SLHD mental health service also matched the needs of consumers nationally. Consumers required assistance in the following areas: relationship difficulties, accommodation, psychosocial interventions, employment and legal and financial difficulties. Please refer to Appendix 3 for a complete analysis of the data. Appendix 4 details what constitutes evidence-based care for this group of consumers.

1.4 Statement of the Problem

The treatment of mental illness requires a collaborative effort from many, including the individual, peers, carers, family, friends, nurses, occupational therapists, psychiatrists, psychologists, social workers and others (AIHW 2012; Rosenberg 2017). The biopsychosocial model of mental illness and holistic healthcare recognises that treatment must include a combination of biological, psychological and psychosocial interventions (Santos et al. 2018). Psychosocial interventions for mental health include interpersonal or informational activities, techniques, or strategies that target biological, behavioural, cognitive, emotional, interpersonal, social, or environmental factors with the aim of improving health functioning and well-being (England, Butler & Gonzales 2015, p. 3). Each professional group working in the public mental health service has discipline specific training and skills in at least one of these domains (Philip 2015).

Nurses have expertise in the physical care of patients that other groups do not possess. They administer medication, take vital signs, provide specialist one-to-one nursing care and assist consumers with bathing, eating and other activities. Psychiatrists have expert knowledge in diagnosis and prescribing medication. Some psychiatrists have additional training and expertise in psychotherapy. Occupational Therapists are able to assist patients in activities of daily living and general functioning. Psychologists have skills in psychological interventions, personality and neurocognitive assessments. Social Workers have specific training in

advocacy, working with families and systems. All of these professional groups offer a unique perspective as well as discipline specific skills that are required in the care of individuals with mental illness (Brown, Crawford & Darongkamas 2001; Freund et al. 2015).

Nursing, psychiatry and allied health together constitute the mental health service clinical workforce. Each group contributes discipline specific skills critical to the provision of evidence-based, patient and family centred care. Each group is necessary to achieve stability, independent functioning and positive outcomes for patients. While the contribution of psychiatrists and nurses in the delivery of mental healthcare is clearly understood in terms of medication and symptom reduction, the contribution of allied health is less clear. Allied health discipline specific skills are required to help discharge patients and optimise their functioning and independence in the community thereby reducing readmission rates (Philip 2015).

Despite this, the unique contribution of allied health professional groups is largely overlooked within the Australian healthcare system (Philip 2015; Turnbull et al. 2009; Williams 2015). In particular, the contribution of the next three largest groups after nursing and medicine, occupational therapists, psychologists and social workers in mental health services is underutilised (Philip 2015; Williams 2015). Better use of their discipline specific skills can achieve better health outcomes for patients, reduce mental healthcare costs by reducing demand for acute care beds as well as reduce 28-day readmission rates (Hill-Smith et al. 2012). Yet despite this knowledge, mental health services have maintained a traditional approach, adhering to a medical model that focuses on acute, episodic care. Funding and health policies have further supported this approach (Freund et al. 2015). It is time for a change to this traditional approach. Mental health services need to focus on providing specific psychosocial and psychological interventions that will assist consumers in managing their mental illness in the community.

However, mental health services have introduced multi-graded positions on community mental health teams and adopted generic models of care. Health service managers have argued that nurses, occupational therapists, psychologists and social workers are all able to perform assessments, mental state examinations, psychoeducation, cognitive-behavioural therapy (CBT), counselling, design individual behaviour management programs, group therapies, and motivational interviewing (MI) among other activities (Sanborn 2014). This is known as “horizontal substitution”, where clinicians with similar training and skills, but from

different professional groups, are required to perform activities that are normally considered the domain of another professional group (Nancarrow & Borthwick 2005). For example, a nursing activity such as monitoring medication is now performed by all allied health disciplines on community teams. Social work activities such as housing and finances are also performed by all disciplines. Psychological interventions such as CBT, ACT, DBT and MI, predominantly associated with psychologists are delivered by all disciplines including psychiatrists. The expectation that all clinicians perform these activities has resulted in blurred roles between the professional groups in mental health services (Cameron 2011). The role of allied health groups in particular has become unclear.

When psychiatric services were first established, nurses did everything for patients. They administered medication, ran therapeutic groups, performed individual counselling, organised occupational activities, managed problematic and aggressive behaviours and attended to all the physical care needs of patients (Corney 1999). The role of mental health nurses became fragmented with the evolution and addition of each new allied health discipline. Occupational therapists took over the occupational and recreational needs of patients. Social workers took over their financial, social and support needs. Psychologists took over behaviour management and psychological interventions. Everyone became responsible for medication monitoring, counselling, support, activities of daily living and aggressive behaviours. This blurring of roles between each discipline led to generic models of care. If mental health services continue to promote generic models of care that encourage horizontal substitution and underutilise the discipline specific skills of allied health, then: *what is the role of allied health in the future of public mental health services? Specifically, the research also aims to understand (1) the factors that influence the identity of mental health professionals; and (2) the impact of the identity that is formed by these professional groups as they work together in multidisciplinary teams, including the impact on quality of care.*

1.5 Justification for this Research

Investigating the role of public mental health service clinicians is important for five critical reasons. First, it is important to develop a greater understanding of the relationship between role, amount of time spent delivering discipline specific skills, strength of professional identity and power (Lambert & Lambert 1991; Leonard 2003). Second, it is important to understand the impact of multi-graded positions on the professional identity of mental health service staff (Lankshear 2003). Third, it is important that consumers of public mental health services are provided with care that is evidence-based and best-practice (Falloon et al. 2004;

Hodges 2007; Lehman et al. 2010). Fourth, with ever-increasing demands on the health budget, provision of care must be cost-effective (Kind & Sorenson 1993; Mathers & Loncar 2006). Cost-effective care is built upon understanding the role and contribution of each clinical group. Fifth, the staffing of mental health teams in the future may require the introduction and use of different types of staff, such as, peer workers or allied health assistants. The research is important in the context of the future of public mental health services because it is likely to involve more team working in community settings, with new roles emerging and this requires significant adaptation by professionals. These new roles or groups may be able to provide generic activities so that allied health disciplines can provide discipline specific activities (Lammers & Happell 2003; Lizarondo et al. 2010). Understanding the role and contribution of each clinical group is necessary for effective interprofessional care.

These are discussed in more detail below.

1.5.1 Strength of Professional Identity and Power

Professional groups in the healthcare sector have been likened to "tribes" (Becher & Trowler 1996; Mandy, Milton & Mandy 2004; Weller, Boyd & Cumin 2014. Each group or tribe acts to protect their territory from hostile takeovers and invasion by other competitive professional groups while simultaneously attempting to expand their own scope of practice. This competitive struggle between healthcare tribes defines the power relationships within the clinical setting (Noble, Strauss & Littlechild 2006). A change in the scope of practice of one discipline is known to impact on the domain of other disciplines and increase feelings of identity threat (Coburn 2006). Horizontal substitution in the MHS between nursing, occupational therapy, psychology and social work has contributed to increased feelings of identity threat. Another common trigger for threat to professional identity is preferential treatment in terms of status, power, remuneration, recognition and opportunities (McNeil, Mitchell & Parker 2014). Psychiatrists enjoy such preferential treatment.

The medical profession has been the most dominant and powerful of all the professional groups within the health sector enjoying social, economic and political advantage over the others (Long et al. 2006; Schofield 2009). Doctors' time has been valued above that of nursing and allied health staff (Long et al. 2006). The medical profession is also the most stratified profession. Stratification refers to the hierarchy between the different specialist areas within a discipline and it helps protect intra-disciplinary boundaries. Multi-graded

positions in public mental health services have weakened the opportunity of nursing and allied health disciplines to stratify (Bladon 2018). Specialisation and developing specific skills have traditionally been the method by which professional groups have remained competitive and sought to increase their power in relationships with other professional groups (Hotho 2008). Yet there is a knowledge gap on what impact the blurring of professional roles, associated with generic models of care has on the relationship between professional identity and power. It can be demonstrated that the shifts in how mental health services are provided in the community, who does what, and the shifts in professional groups involved in such care, and how the groups interact as multidisciplinary teams, all have a potential effect on identity. Other factors that influence identity are attachment, belonging and the power held by each disciplinary group. For the effective functioning of interprofessional teams, it is important to understand the interplay of these factors.

1.5.2 Impact on Strength of Professional Identity

There is a paucity of empirical work exploring the development of professional identity in allied health professional groups. Little is known about the impact of generic models of care on the professional identity of public mental health service staff (Adams et al. 2006: Corney 1999). The importance of clothing, specific roles and professional equipment or possessions has long been recognised as critical to identity formation (James 1890). The white laboratory coats and stethoscopes worn by doctors in hospitals up until the 1980s were an integral part of their professional identity formation (Sullivan 2000). The same could be said of nurses with their uniforms and silver fob watches (Sauer 2015). Since the 1980s, however, nurses, occupational therapists, psychologists and social workers in mental health services have not worn uniforms and therefore have been less identifiable as distinct professional groups.

Uniforms have always played a key role in professional identity formation and in delineating occupational boundaries (Timmons & East 2011). For example, when the National Health System (NHS) attempted to introduce a *corporate uniform*, physiotherapists and occupational therapists were outraged and actively opposed this proposal. They argued that being forced to wear the same uniform as all other occupational groups undermined their sense of professional identity and damaged their pride (Pratt & Rafaeli 1997; Timmons & East 2011). The group uniform symbolised their sense of belonging to a professional group and clearly identified each group from the other occupational groups. The fact that public mental health service staff, other than nurses, have never worn uniforms may have further contributed to

role blurring between nurses, occupational therapists, psychologists and social workers and effected professional identity formation.

Professional identity has been linked to the core activities and responsibilities of the professional role (Davies 2002). Expertise is said to be at the heart of professionalism (Davies 2002). Yet it is not known what happens to professional identity when positions are multi-graded which leads to role blurring. This role blurring is also known as creeping genericism (Brown, Crawford & Darongkamas 2001). Moller and Haber (1986) hold that the erosion of traditional roles in public mental health services specifically, and health services generally, is a corollary of deliberate policy changes and models of care promoting generic rather than specific skills. Demarcation between roles is required to ameliorate the loss of professional identity (Lankshear 2003). The impact of blurred boundaries on strength of professional identity in public mental health service staff is not known. Similarly, whether there is a difference in strength of professional identity between inpatient and community public mental health staff, or between the professional groups in mental health services, is not known.

The answer to these questions is important because a strong sense of professional identity has been linked with professionalism and clinicians that demonstrate the qualities of "good" practitioners (Creuss et al. 2014). A recent study found that strong professional identity was associated with less turnover intention in social workers (Jiang et al. 2017). Similarly, professional identity was positively correlated with job satisfaction and less turnover in nurses (Sabanciogullari & Dogan 2015). A strong professional identity in medical specialists was linked to greater motivation and effort to provide high quality patient care and to perform optimally in multidisciplinary teams (Molleman & Rink 2015). Strong professional identity in teachers was manifested in increased job satisfaction, occupational commitment, self-efficacy and motivation (Canrinus et al. 2012; Kelchtermans 2012). Therefore, it is important to understand the impact of role blurring on professional identity in healthcare staff

1.5.3 Provision of Care

It is important to know whether the mental health service provides interdisciplinary care that is evidence-based and adequately addresses the needs of consumers (AIHW 2012). Evidence-based care translates into benefits for the patients, clinicians and health service (Lehman et al. 2010). Evidence-based care and best-practice interventions shorten the length of admissions. They keep patients well and able to function independently in the community and increase

quality of life (Berry & Haddock 2008; Cohen & Minas 2017). Clinicians experience better patient outcomes and increased work satisfaction (Khamisa et al. 2015). Healthcare service benefits include increased bed flow, increased occasions of service, reduced 28-day readmission rates and positive outcomes (Brazier et al. 2017).

It is also important to understand the specific skills that differentiate each professional group from other groups (Lloyd, King & Bassett 2002), and what proportion of time clinicians are engaged in activities that require either discipline specific skills or generic skills (Lloyd, King & McKenna 2004). There is a knowledge gap on whether discipline specific skills of each professional group in the mental health service are maximised or underutilised. If the discipline specific skills of each professional group are underutilised, it is not known what impact this has on patient care and the clinicians themselves. There is a fear that "low level genericism in which every member does a bit of everything and none of it well" (Loxley 1997, p.43) denies patients access to the expertise and knowledge provided by each professional group (Maddock 2015; Williams 2015).

A key question for the future provision of high quality, cost-effective, public mental health services is what mix of generic and specific skills are required? Yet few studies have explored this key issue and even fewer have looked at it recently. It is essential to understand the impact of identity on delivery of care and its significance in the provision of efficient and high-quality care that meets standards, and addresses the needs of the community.

One study found that occupational therapists and social workers on mental health teams were involved in activities that required generic skills most of the time (Lloyd, King & McKenna 2004). However, there do not appear to be any studies in relation to nursing, psychiatry or psychology. There is a knowledge gap in relation to how many of the daily activities performed by the five major professional groups in public mental health services require discipline specific or generic skills. The literature is absent on what would be considered an acceptable ratio or standard between time spent delivering discipline specific activities and time spent delivering generic activities. It is important to understand this in order to restructure models of care in public mental health services to maximise the use of discipline specific activities in order to meet consumer needs.

Similarly, whether the amount of time spent on discipline specific skills varies across the five professional groups remains an open question. It is important to know whether the discipline specific skills of each professional group are being maximised or underutilised. If discipline

specific skills are being underutilised, then perhaps the models of care need to be changed in order to maximise use of discipline specific skills. Alternatively, public mental health services may need to consider employing a different clinical workforce if the discipline specific skills of the current professional groups are not required.

It is acknowledged that the focus on consumers' needs and how to meet these without the inclusion of consumers in the study is a potential weakness. However, the focus of this particular study is on the development of the professional groups themselves and not on consumers. Specifically, the research is about exploring the: factors that influence the identity of mental health professionals; and, impact of the identity that is formed by these professional groups as they work together in multidisciplinary teams, including the impact on quality of care and meeting the broad range of consumer needs in public mental health services.

1.5.4 Economic and Financial Considerations

Being able to determine what skills are required in the provision of care to consumers with mental illness will have economic and financial implications (Levit et al. 2008). If the activities provided by clinicians predominantly require generic skills and can be delivered by one professional group or new professional groups (such as, mental health workers, peer support workers or allied health assistants) then this may lead to the development of models of care using a different workforce in the future (Lizarondo et al. 2010; Scholz, Bocking & Happell, 2017). A future workforce that includes greater use of emerging healthcare professional groups may be more cost-effective than employing allied health professionals (Lizarondo et al. 2010).

Enrolled nurses (ENs) and assistants in nursing (AINs), also known as healthcare assistants (HCAs), emerged primarily to perform generic non-nursing specific duties. Examples of such activities are escorting consumers to shops and other specialist appointments, supervising meal times and other similar activities thereby enabling registered nurses to spend their time on those duties that required specific nursing skills and expertise (McKenna, Hasson & Keeney 2004). Thus, highly trained, and by comparison more expensive to employ, nurses were able to spend more of their time in discipline specific activities. Similarly, allied health assistants in hospital settings have performed the same function as the ENs and AINs (Duckett 2005). Support workers and peer workers have been introduced to public mental health services (Wilberforce et al. 2017). Perhaps these newer healthcare groups can perform the administrative and generic activities enabling occupational therapists, psychologists and

social workers to spend more time delivering discipline specific interventions. Thus, it is important to understand how role blurring may have a financial impact on public mental health services in the future.

1.5.5 Staffing of Public Mental Health Services

Determining what skills are required in the provision of care to consumers with mental illness may have implications for recruitment and staffing of public mental health services in the future (Liberman et al. 2001; Robinson & Cottrell 2005). If, for example, one professional group, such as nurses, has all the skills required to deliver care in the community, then perhaps it is not necessary to employ teams of allied heath clinicians. Similarly, if psychiatrists can provide all the psychotherapeutic interventions then perhaps mental health services do not need to employ psychologists. Recruitment, staffing and team configuration may call for different approaches in the future if the discipline specific skills of all allied health professional groups are not required. Therefore, it is important to understand the impact of role blurring on the staffing of public mental health services in the future.

1.6 Previous Research

In summary, what is known from previous research is that the multi-grading of positions and the case management model of care in public mental health services have promoted generic skills over specific skills (Robinson & Cottrell 2005). This approach has resulted in a blurring of roles and changes to the scope of practice between the five largest professional groups represented in public mental health services (Brown, Crawford & Darongkamas 2001; Cameron 2011; Crawford, Brown & Majomi, 2007; Newbigging, 2004). This emphasis on multidisciplinarity "has meant that allied health are losing their assessment skills within their own profession" and their distinctive roles (Nugus et al. 2010, p. 900). If this continues, the full range of consumer needs in public mental health services will not be met.

The sense of identification with a clinical tribe influences the development of professional identity (Cova & Cova, 2002; Mandy, Milton & Mandy 2004; Weller, Boyd & Cumin 2014). Being a member of a particular clinical tribe engenders a sense of territoriality (Baldwin 2007). Each tribe jostles for power and attempts to protect its own territory from invasion and takeover by other tribes (Dombeck 1997).

Membership of a professional group is a stance assumed by public mental health staff (Brookes et al. 2007). Individuals become a member of a professional group by learning and assimilating the behaviours, attitudes and values of that group through a process of

professional socialisation (Hoeve, Jansen & Roodbol 2014; Mann et al. 2005). Professional socialisation occurs through formal teaching and assessment, role modelling and mentoring (Creuss et al. 2015). Genericisation interferes with the process of professional socialisation and therefore professional identity formation.

The specific activities performed by members of each professional group determine membership of that group and influence the development of professional identity. The specific activities performed by each professional group also help to differentiate that specific group from the others (McKenna, Keeney & Bradley 2003). The professional groups in the public mental health service strive to maintain and expand their scope of practice in a changing and competitive healthcare landscape. Each group jostles for power (Coburn 2006). However, when work activities require predominantly generic skills, rather than discipline specific skills, it is not known how this affects professional identity and power relationships between the professional groups. Nor is it known what impact this may have on the future roles of the professional groups in public mental health services.

1.7 The Research Problem and Questions

This research is an exploration (sub-questions) and investigation (hypotheses) using a mixed methods study. The research is divided into the primary research question, eight sub-questions and three hypotheses.

1.7.1 Primary Research Question

The research aim is to answer the question:

What is the role of allied health in the future of public mental health services?

1.7.2 Research Sub-Questions

There were eight research sub-questions related to four critical themes associated with the role of professionals: activities, skills, professional identity and power (Table 1.1).

Table 1. 1: Theme and research questions

Theme	**Research questions**
1.Activities	1.1 What activities are performed by the five disciplines in the mental health service?
	1.2 How much time is spent by each discipline on performing these activities?

Theme	Research questions
2.Skills	2.1 Do the activities performed by each of the five disciplines require generic skills or specific skills?
	2.2 Who does each discipline believe should perform these activities?
3.Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines inpatient and community settings?
	3.2 What is the relationship between strength of professional identity and discipline specific activities?
4. Power	4.1 What is the interaction between professional identity, discipline specific activities and power?
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?

1.7.3 Hypotheses

The research tested the following three hypotheses related to professional identity (Table 1.2).

Table 1. 2: Hypotheses

Hypothesis
1. Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.
2. Strength of professional identity will have a positive relationship with power.
3. There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

1.8 Theoretical Context and Contribution

Theoretically, this research is important for a number of reasons. The research has contributed to a new conceptual model of professional identity, called the *Four Factor Model of Professional Identity*, or 4FM-PI. The research and this model will encourage and result in the development of new psychometric instruments to measure professional identity in the future. At present psychometric instruments that measure professional identity, conceptualise the construct as a two-factor model. The two factors are belonging and attachment to a particular group (Adams et al. 2006). Yet studies that are more recent suggest that

professional identity should be reconceptualised as a multidimensional and multi-factorial construct (Barbour & Lammers 2015). The current research has achieved this.

This research has contributed to, and extended our understanding of, the relationships and interactions between tribal, role, and stakeholder theories and specific versus generic skills on strength of professional identity. The research has explored how these theories explain the development and strength of professional identity. Strength of professional identity has rarely been explored among allied health clinicians (Adams et al. 2006). It has never been measured or compared across the professional groups in public mental health services. Yet strong professional identity has been linked to increased job satisfaction, less turnover, professionalism and greater motivation and effort to provide high quality clinical care (Jiang et al. 2017; Molleman & Rink 2015; Sabanciogullari & Dogan 2015).

The research will help clarify whether strength of professional identity is influenced by the proportion of time clinicians spend on activities that require discipline specific skills as opposed to activities that require generic skills. Strong professional identity has been positively correlated with confidence, power and agency in teachers (Izadinia 2015). It is important to understand whether there is a similar positive relationship between these factors in healthcare practitioners. Clinicians whose skills and expertise are underutilised may start to lack confidence in their skills, feel disempowered and lack purpose. Clinicians who experience these feelings are less likely to feel satisfied with their role. Unhappy clinicians are not as engaged with the work or their patients (Molleman & Rink 2015).

Stakeholder theory has not been applied to public mental health services (Eljiz 2009) and this research has contributed to the notion of power, one of the three stakeholders attributes in Mitchell's (1997) stakeholder theory being the most salient attribute. Studies investigating the influence of power on strength of professional identity have not been discovered (Davies 2002). This research has explored the relationship between power and strength of professional identity. It has also explored whether power provides clinicians with greater opportunity to use discipline specific than generic skills. This is important in being able to understand how doctors have been able to maintain their dominance over the other professional groups in healthcare and determine the assignment and delegation of roles (Kuhlmann & Burau 2018).

The research has assisted in clarifying how well the different professional groups in the public mental health service understand their own roles and that of the other professional

groups (Carlisle, Cooper & Watkins 2004). It has clarified how much time is spent by each professional group in activities that require generic skills compared with specific skills. If the data suggest that clinicians are predominantly engaged in activities that require generic skills then this may have implications for the recruitment, staffing, structure and funding of public mental health services in the future.

The study also demonstrates a flexible, innovative approach to researching in the mental health field. The research uniquely combines four survey tools, including one purpose-designed, empirically derived tool - the Mental Health Activities Checklist, for the investigation. This approach demonstrates the flexibility and innovation necessary to undertake a sophisticated, complex study of a significant problem.

1.9 Declaration of Scope and Key Assumptions

The scope of the research was limited to one public mental health service in a metropolitan LHD in NSW. This LHD has a very busy public mental health service and is comparatively well resourced compared with other rural or remote public mental health services (AIHW 2018). The LHD provides care for a high number of consumers who are transient, culturally and linguistically diverse (CALD), who identify as lesbian, gay, bisexual, transgender, queer or intersex (LGBTQI) (SLHD MHS 2017).

A key assumption of the research is that the issues for public mental health practitioners working nights and weekends may be different to those working days. Allied health staff are generally not rostered at night or weekends on inpatient units. Therefore, the researcher visited all inpatient units on night and weekend shifts in order to include those staff. Data collection took place from September to mid-December 2016.

1.10 Methodology

Participants were drawn from the five largest clinical groups employed in the SLHD public mental health service; nursing, occupational therapy, psychiatry, psychology, and social work were included. Staff from other professions were excluded. This study was a mixed methods design using both quantitative and qualitative research methods (Bryman & Bell 2007). The main research study was informed by two pilot studies.

The first pilot study consisted of a file audit of 50 randomly selected SLHD mental health service patient files. The files were held in medical records. The pilot study confirmed that the needs of consumers of the SLHD were the same as those of consumers nationally. The

consumers of the SLHD public mental health service required assistance in the following domains: relationships, accommodation, psychosocial, employment and legal. A review of the literature confirmed these needs were best met with an evidence-based approach to treatment that combined pharmacotherapy with psychological and psychosocial interventions (Fenton 2000; Fenton & Schooler 2000; Grace et al. 2017). The second pilot study consisted of several allied health professionals documenting activities over a two-week period. This allowed the researcher to develop the Mental Health Activities Checklist (MHAC), one of the instruments required in this study. The MHAC is a purpose-designed, empirically derived tool. The development of the MHAC and approach taken demonstrates the flexibility and innovation necessary to undertake a sophisticated, complex study of a significant problem.

The main research study used both quantitative and qualitative methods. The quantitative research was conducted to produce descriptive statistics and utilised deductive strategies. The qualitative research focused on deriving perceptions and understanding experience. Cross verification of the data was facilitated by triangulation (Flick 2004). First, an on-line survey was administered and consisted of four psychometric measures: the Demographic Data Questionnaire (DDQ), Mental Health Activities Checklist (MHAC), Professional Identity Scale (PIS) and Power Questionnaire (POWQ). Their use and combination is an original combination and unique to this study. Across the five professions, 320 staff elected to participate, for a 44% response rate. Data was analysed using inferential statistics. Descriptive data such as gender, age of respondents, professional group, years of experience and years of experience in mental health was analysed using Excel. SPSS™ Version 18 was used to undertake factor analysis, chi-square analyses, regressions, correlations and paired T-Tests.

Second, 20 semi-structured interviews were conducted. Ten staff members from both inpatient and community services participated, with four from each of the five professional groups. Hour-long interviews were held and interviews were transcribed using a professional transcription service, checked for error and authenticity. Data were retained into QSR NVivo™ 10 and thematically analysed (Clark & Braun 2013; Burns & Grove 2005).

Triangulation of the data assisted the researcher to overcome the limitations inherent in both quantitative and qualitative research (Brymen & Bell 2007). By using a survey questionnaire, the researcher was able to obtain descriptive and numerical data that measured strength of professional identity, power and time spent on discipline specific activity. This allowed

comparisons to be made within and across professional groups. Conversely, using interviews allowed the researcher to understand the tensions and role blurring between professional groups.

Central to the successful use of the mixed-methods approach was reflective and reflexive practice at all stages of data collection (Saks & Allsop 2012). The researcher was mindful of being employed in the LHD and of her seniority and position within the service. The researcher attempted to remain objective at all times to ensure meaning and perceptions in this study were constructed by the participants.

Even so, researcher biases may have influenced this study. These were largely addressed through supervision, reflective practice and presentations to colleagues at professional and academic forums (see pp. xxx-xxxii) (Saks & Allsop 2012; Warin et al. 2006). The researcher's own expectations, predictions and beliefs were identified and challenged. Participant biases may have included self-selection and social desirability bias. These biases were reduced by maximising sample size in the quantitative research and using snowball sampling in the qualitative research. Research ethics were adhered to at every stage of the study.

1.11 Outline of Thesis

The thesis comprises eight chapters. The introductory chapter commences with the research question and provides a brief overview of the rationale for this research.

Chapter 2 provides the context. There is a brief historical overview of the development of public mental health services in Australia. The chapter identifies the major social, historical, medical and political developments that have influenced our understanding of mental illness and treatment of the mentally ill. The chapter then traces the historical development of the five major professions currently represented in public mental health services: nursing, psychiatry, occupational therapy, psychology and social work. Tracing this development is an effort to understand how role blurring between these professional groups has evolved.

Chapter 3 reviews the literature on tribal, role, professional identity and stakeholder theories and specific versus generic skills. It traces the theoretical development of professional identity and maps the interaction between these theories on professional identity. The chapter reviews the impact that new models of care, changing roles, extended scope of practice and blurring of roles have on the professional identity of staff employed in public mental health

services. A new model of professional identity is developed called the *Four Factor Model of Professional Identity* (4FM-PI).

Chapter 4 provides a description and justification of the research methods. This research adopts a mixed methods research design using both quantitative and qualitative methods. The survey questionnaires provide a profile of the study participants. Participants provided details about the types of activities performed by staff employed in public mental health services. The questionnaires also measure strength of professional identity and power of each professional group.

Chapter 5 presents the quantitative analysis of the data. Question 1 describes the activities performed by the five disciplines in the public mental health service and how much time each discipline spends on performing these activities. Question 2 examines whether the activities performed by each of the five disciplines require generic skills or specific skills. Question 3 explores the strength of professional identity of each of the five disciplines and the relationship between strength of professional identity and discipline specific activities. Question 4 discusses the interaction between, professional identity, discipline specific activities and power. The three hypotheses are tested.

Chapter 6 presents the qualitative analysis of the data. This chapter presents the exploration of staff views on (a) the activities they perform, (b) their role, (c) the role of other groups, (d) power relationships between the professional groups, and, (e) whether the public mental health service is meeting the needs of consumers.

Chapter 7 provides a summary of the research findings, the triangulated data, and a discussion. This chapter describes the implications of the research. The researcher argues that to address the needs of consumers of public mental health services, discipline specific allied health skills are required now and into the future. Doing so constitutes best-practice and evidence-based care.

Chapter 8 summarises the research, highlights the unique contribution to the literature made by the research, acknowledges the limitations of the study and identifies areas for future investigation. Recommendations are made about further exploration of the 4FM-PI model of professional identity developed and tested in this dissertation.

1.12 Summary

Case management models and multi-graded positions in public mental health services have promoted generic skills over specific skills (Robinson & Cottrell 2005). This has resulted in a blurring of roles and changes to the scope of practice between the five largest professional groups represented in public mental health services (Brown, Crawford & Darongkamas 2001; Cameron 2011; Crawford, Brown & Majomi, 2007). When work activities require predominantly generic skills rather than discipline specific skills it is not known how this affects professional identity or power relationships between the professional groups on public mental health teams. The impact of this has not been explored. Nor is it known what impact this may have on the role of allied health in the future of public mental health services.

In summary, this chapter introduced the overarching research question, sub-questions, and hypotheses, and provided a background to the research. A brief description of the Australian health system and the SLHD mental health service was followed by a statement of the problem as well as a brief overview and rationale for this study. Previous research in this area and the unique contribution of this research to the theoretical and empirical literature were covered. The scope of the study, research methodology and an outline of the thesis chapters were presented.

This investigation now commences in Chapter 2 by exploring the evolution and devolution of public mental health services in Australia and the impact on nursing, psychiatry, occupational therapy, psychology and social work.

2. Historical Context

2.1 The Evolution and Devolution of Mental Health Services

"The farther backward you can look the farther forward you are likely to see."(Winston S. Churchill)

This chapter provides a brief historical overview of mental illness and the development of public mental health services in Australia. The chapter focuses on the major social, historical, medical and political developments that influenced our understanding of mental illness and treatment of the mentally ill in Australia. It commences with the establishment of the first public asylum in England in 1247, the arrival of the First Fleet in Australia in 1788 and the establishment of asylums in Australia. The chapter then traces the historical development of the five major professions currently represented in public mental health services: nursing, psychiatry, occupational therapy, psychology and social work. The last three are the allied health disciplines most commonly employed by public mental health services (AIHW 2013). Finally, there is a brief discussion on the sociology of the professions.

2.2 In the Beginning

"The house was meant to keep them in. Once they came they never left" (Roux 2013, p.1).

This section below focuses on the historical development of the mental health professions. The history of mental illness and treatment of the mentally ill in Australia evolved within a custodial framework (Barnes & Bowl 2001). A custodial framework is defined by acts of detention and deprivation of liberty in order to punish the aberrant in society (Barnes & Bowl 2001). Under this framework, mental illness was managed by imprisoning the mentally ill behind asylum walls in order to reduce the risk posed to the wider community. Doing so disempowered these individuals and punished them for being ill (Barnes & Bowl 2001). The language of mental illness was pejorative (Gilman 1988). Those with mental illness were referred to as lunatics and inmates (Evans 1966). Their keepers were wardens (Gilman 1988).

Bethlem Royal Hospital (otherwise known as Bedlam), the first recorded public mental asylum, was founded in London in 1247 (Shorter 1997). Following the opening of Bedlam Royal Hospital, many more asylums were established throughout Europe and their intake was primarily drawn from the poor and destitute. The goal of these asylums was twofold: to isolate those individuals who caused trouble and could not be safely managed at home as well as to provide care for them (Digby 1985b). Despite these noble intentions, however, asylums were places of cruel conditions, where inmates starved, were chained to posts and left in their

own vomit, urine and excreta (Bostock 1968). Treatment was either non-existent or barbaric. Once institutionalised inmates had little hope of being released (Evans 1966). The asylum walls were meant to keep them in, and the rest of society out.

Wealthy families tried to manage insane individuals at home (Parry Jones 2013). They would confine the person to a locked wing or room of the estate as depicted in the novel, Wuthering Heights (Bronte 1847). Those familiar with the story will recall that Mr Rochester had sequestered his mentally ill wife in a locked wing of the estate with a servant assigned to keep her in order. In England, by the middle of the 18th century wealthy families with an insane individual they could not manage at home would confine them to private houses under the supervision of a doctor or a clergyman (Parry Jones 2013). The mentally ill at this time were feared and viewed as evil or possessed (Evans 1966). The doctors who treated the mentally ill were referred to as "alienists". These doctors were not allowed to treat other types of patients (Parry Jones 2013). However, they later played a critical role in the establishment of asylums, which ironically "alienated" those with mental illness from society (Parry Jones 2013).

Up until the early 19th century, mental illness was not considered a medical disorder. It was referred to as lunacy (Scull 1993; Shorter 1997). Very few were interested in the plight of the mentally ill (Parry Jones 2013). Untrained attendants or wardens were charged with their care. Treatment consisted of chains, shackles and other forms of physical restraint (Parry Jones 2013). It was not until the latter part of the 19th century that the medical fraternity became interested in mental illness and began to conceptualise it as a medical condition amenable to treatment (Scull 1979). This shift in thinking heralded a growing interest in the mentally ill and paved the way for the development and contribution of different professions in treating mental illness.

2.3 The Development of Mental Health Services in Australia

Many of the 750 convicts who arrived on the First Fleet in 1788 were mentally ill (Parkinson 1981). The new settlement was governed as a military autocracy, whereby "the Governor's authority was virtually absolute and it was the legal foundation on which lunacy administration rested" (Lewis 1988, p. 4). The penal nature of the colony, steeped in a military and custodial regime influenced the model of care for these people (Bostock 1968). There was no distinction made between criminals, those with intellectual disability or mental

illness (Bostock 1968). Anyone who was deemed a risk to society was imprisoned (Coleborne 2003).

Initially those designated criminals, idiots or lunatics were bundled together in the Town Gaol at Parramatta. They were held to be a nuisance and menace to the community at large (Bostock 1968). By 1811 a mental asylum was established at Castle Hill, NSW and an attempt was made to separate those who were criminal from those who were mentally ill (Coleborne & MacKinnon 2006). Untrained male attendants hired for their physical size and strength staffed the new asylum (Parkinson 1981).

In 1838, Tarban Creek Asylum, Sydney, later renamed Gladesville Hospital, became the first purpose built psychiatric facility in Australia (Moncrieff & Crawford 2001). Inmates were drawn from both the Sydney and Melbourne settlements (Bostock 1968). The first superintendent appointed had gained experience at St Luke's Hospital for the mentally ill in England. His role was twofold, the maintenance of discipline, restraint and order as well as financial oversight. Yet this was patently insufficient and a growing awareness of the need for medical involvement in the treatment of the mentally ill began to form (Bostock 1968).

A further 12 asylums were established in NSW during the 1800s housing up to 2000 inmates. In 1843, the Lunacy Act was introduced in Victoria. This piece of legislation heralded a shift in the conceptualisation of mental illness, an awareness of the need for medical treatment and the acceptance of responsibility by governments for care of the mentally ill (Silove 2002).

There was also growing recognition of the abuses being perpetrated against the mentally ill (Coleborne & MacKinnon 2006). Because of this recognition, in 1852 a government enquiry was formed to investigate reports of violence, corruption and general mismanagement of mental asylums. A direct result of the enquiry was that doctors slowly replaced lay superintendents as administrators of the asylums (Lewis 1988). This marked the beginning of the moral treatment era and more humane conditions for inmates (Brothers 1962). The medical approach introduced notions of treatment and rehabilitation and moved away from a purely custodial framework (Silove 2002).

2.4 The Discovery of Chlorpromazine

The single most important development in the treatment of mental illness was the discovery of chlorpromazine in 1951, otherwise known by its trade name, Largactil. Chlorpromazine is an antipsychotic medication that revolutionised the treatment of schizophrenia (Ban 2007).

Like most innovations, the discovery of chlorpromazine as a treatment for schizophrenia was serendipitous and resulted from researchers in France trying to find a cure for malaria. Instead, they found this newly synthesised drug had a sedating effect on patients. Chlorpromazine secured governmental approval in 1954 as the first psychiatric medication and provided a breakthrough in the treatment of mental illness (Beer 2009).

Once psychiatrists realised that mental illness could be treated with medication, they saw a greater role for themselves in the treatment of the mentally ill (Guze 1992). Being the only professional group who could diagnose and prescribe medication assured them of dominance over nursing and any others involved in the care of individuals with mental illness. The discovery of the antipsychotic medications, also referred to as the era of biological treatment culturally legitimised psychiatry as a subspecialty of medicine (Coleborne & MacKinnon 2006). The pharmacological management of schizophrenia, enabled patients to embark on programs of rehabilitation that included therapeutic, vocational and recreational activities (Ban 2006). Psychiatrists left these less prestigious activities to nurses and later occupational therapists (Nolan 2000).

Psychiatric institutions developed work schemes consisting of farming activities such as gardening, growing vegetables and tending to livestock (Brothers 1962). Male patients were encouraged to contribute to outdoor and more physical activities such as brickwork, woodwork, and farming. Female patients were engaged in food preparation in the kitchens, in the laundry and sewing rooms. These activities were seen as innovative, adaptive and a means for all patients to make a positive contribution to the upkeep of the asylum (Brothers 1962). They were also a means for engaging the patients in occupational and rehabilitative activities that were mostly supervised by attendants and nursing staff (Hughes 1958).

Rapid change occurred following the Second World War, economically, politically and socially (Brothers 1962). The era between 1950 and 1970 introduced mepbromate in 1955 (otherwise known as happy pills), tricyclic antidepressants in the late 1950s, the first of the benzodiazepines in 1960, the first popular MAOI (monoamine oxidase inhibitor) in 1961, diazepam (Valium) in 1963, haloperidol in 1967 and cognitive therapy in the 1960s (Clark 1997). These developments, among others, cemented the role of psychiatry in the care and treatment of mental illness. The ability to stabilise and manage the symptoms of psychosis and mood disorders, offered those with mental illness hope of discharge from the asylums (Coleborne & MacKinnon 2006). The decision to discharge patients was made by

psychiatrists. This ensured that the medical model and psychiatrists remained dominant in the treatment of the mentally ill.

2.5 Abuse of the Mentally Ill

A seminal paper, for NSW at least, was The Richmond Report, which was published in 1983. D.T. Richmond was Chairperson of the NSW Inquiry into Health Services for the Psychiatrically Ill and Developmentally Disabled. He championed the rights of the mentally ill to live in the community. This report argued for the deinstitutionalisation of people with mental illness and uncovered the various abuses perpetrated against those individuals being held in institutions. Following publication of the Richmond Report (1983) deinstitutionalisation in Australia commenced in 1992 but it was inadequately funded and poorly orchestrated (Bircanin & Short 1995).

Reports of mentally ill people living on the streets, unmedicated, hungry and dying prompted two inquiries. These inquiries were by the Australian Health Ministers Advisory Council (AHMAC) Task Force, convened in 1991, and the National Inquiry into the Human Rights of People with Mental Illness, by the then Human Rights and Equal Opportunity Commissioner, Brian Burdekin, The Burdekin Report (1993). Both of these enquiries addressed justice, sociological, economic and epidemiological issues.

2.6 Change in Approach to Mental Health

Following these inquiries, the preferred model of treatment for those with mental illness moved towards community care with brief hospitalisations in acute inpatient units (AIHW 2013). Managing those with mental illness in the community called for new models of care that introduced generic care coordinator positions staffed by nurses, occupational therapists, psychologists and social workers (Henderson & Walter 2009). This in turn has resulted in extended scopes of practice and blurred boundaries between these professional groups (Corney 1999; Newbigging, 2004).Where once, mental health nurses did everything, today these activities are shared by the professional groups in mental health services (Cleary 2003). In order to understand the present tensions and the blurring of boundaries between these professional groups, it is important to revisit the past and understand each professional group's evolution and development over time. Sections 2.7 to 2.11 provide a brief history of the evolution of the five major mental health professional groups.

2.7 Mental Health Nursing

The historical development of mental health nursing in Australia occurred somewhat separately to other branches of nursing (Happell 2007). This stems largely from the fact that madness was historically perceived to be the result of bad blood or demonic possession (Evans 1966). It was also considered a weakness of character rather than disease or illness (Singh et al. 2001). The emphasis of mental healthcare was custodial rather than therapeutic because there were no known effective treatments for mental illness, until the pharmacological discovery of chlorpromazine and other antipsychotic agents in the 1950s (Happell 2007).

Untrained male attendants delivered care in the mental asylums during the 1900s (Brothers 1962). Often, those recruited to these positions were held to be of similar social rank to the "inmates" and were called, "lunatic attendant", "keeper" and "warden" (Goodwin & Happell 2007, p. 56). Patients were initially housed together. Later they were segregated into male and female wards. Once this occurred it paved the way for employing female attendants (Keane 1987). Employing female attendants was necessary to protect the female patients from the sexual abuses they were subjected to from both the male patients and the male attendants (Gilman 1988). These female attendants initially began to provide nursing care to the female patients. Later they also began to provide occupational and recreational activities for all patients (Bessant 1999). Today, these activities are provided by occupational therapists. Training for attendants started slowly in the 19th century but did not commence in earnest until the 20th century. Medical staff delivered the initial training to the attendants by way of lectures. With formal training, mental health nursing began to attain some credibility and worth as a distinct branch of nursing (Goodwin & Happell 2007).

Major tranquillizers were introduced in the 1950s (Ban 2006). Major tranquillizers are also known as antipsychotic or neuroleptic medications. They are used to treat mental disturbance or psychosis. These medications provided psychiatrists and psychiatric nurses opportunity to dispense with managing mental illness through physical restraint. Anti-psychotic medications made it possible to offer pharmacological, psychological, occupational and recreational treatment and interventions (Barnes & Bowl 2001). Psychiatric nurses were able to establish therapeutic relationships with patients and thereby offer individual and group therapies (Bessant 1999). They led the way in introducing these innovative new types of therapies, only to have ownership wrested from them by, occupational therapy, psychiatry, psychology and social work (Cade 1979).

The 1970s and 1980s marked two major changes to mental health nursing. The first change followed the scaling down and closure of large psychiatric institutions because of enquiries into institutional abuse (Burdekin, Hall & Guilfoyle 1993). Community based care and smaller inpatient units located within general hospitals replaced stand-alone psychiatric hospitals (Bessant 1999). Deinstitutionalisation moved mental health nursing from predominantly an inpatient setting to the community. The knowledge base required for mental health nursing expanded enormously, borrowing from developments in occupational therapy, psychology and social work. This was reflected in new models of training for psychiatric nurses and new models of community care (Happell 2009).

The second major change in mental health nursing occurred in 1984, when the tertiary sector took over responsibility for nursing education and training. Mental health nursing had historically been treated as a separate branch of nursing and those trained in this area (under the old style hospital training system) were unable to practice as general nurses. They were also perceived to be inferior to general nurses (Farrell & Carr 1996). University training meant that all nurses underwent generalist training over four years followed by specialist mental health training (Happell 1998; Stevens & Crouch 1992). These developments, including registration and credentialing, added legitimacy to psychiatric nursing and helped to develop and strengthen the power and professional identity of psychiatric nurses (Frankland 2010). These developments also contributed to the blurring of boundaries between the different professional groups working in mental health (Hercelinskyj et al. 2014).

2.8 Psychiatry

The roots of psychiatry can be traced back to the Ebers Papyrus, 1550BC, one of the earliest medical textbooks that recognises and documents mental illness (Cade 1979). Back then, treatment of the mentally ill was shrouded in fear and superstition and it remained so up until the 1960s. Mental illness was poorly understood for centuries and those who were mentally ill were locked away in asylums (Scull 1979). Significant developments in understanding mental illness commenced in the 17th century. The publication of the anatomical treatise, De Anima Brutorum, was the first text to describe psychology in terms of brain function (Willis 1672). In 1724, Cotton Mather, an influential New England Puritan minister began to promote physical explanations of mental illness over demonic possession (Ibell 2004).

The publication, Treatise on Madness, called for an end to the brutal treatment of inmates in asylums, advocated for treatment of the mentally ill and for recognition of psychiatry as a

respectable profession (Battie 1758). Similarly, in 1793, French physician Philippe Pinel ordered that chains be removed from mental patients at the Biçetre Hospital, Paris and in 1809 published the first description of dementia praecox, now known as schizophrenia. Other physicians followed Pinel's lead and advocated for a moral treatment of the mentally ill. In 1808, Johann Christian Reil, a German physician coined the termed psychiatry (Dax 1989; Digby 1985a). These developments heralded a growing recognition of mental illness as a medical condition, psychiatry as a medical specialty and the beginning of the moral treatment era (Scull 1995).

Yet despite these developments in the conceptualisation of mental illness, treatment was still confined to removal of these individuals from society (Scull 1979). Treatment of mental illness continued to be physical and experimental in nature (Cade 1979). For example, in 1890 Burkhardt performed the first frontal lobe lobotomy. Lobotomies involve surgery to the cortical structures in the brain. They were used to manage highly agitated patients. Lobotomies and electroconvulsive therapy (ECT) treatments gained widespread use in the 1940s and 1950s. These techniques were perfected by German psychiatrists on prisoners in the concentration camps. The early lobotomies resulted in death or severe, permanent cognitive disability. Russia and other countries banned the use of lobotomies in 1950 but they continued to be performed in the United Kingdom (UK) and United States (US) until the mid-1980s (Coleborne & MacKinnon 2006). Part of the reason for this is because first, such physical treatments allowed the medical profession to maintain dominance in this field and second, there were no other effective treatments available.

Continued experimentation on the mentally ill led to the discovery in 1903 of barbital (Veronal), the first barbiturate to find clinical use. A further significant shift occurred in 1948 when Melbourne psychiatrist, John Cade, accidently discovered that lithium carbonate could be used in the treatment of bipolar disorder (Ban 2006). However, the critical turning point for psychiatry and the treatment of mental illness occurred in the 1950s with the discovery of chlorpromazine (Largactil) (Bostock 1968). Chlorpromazine revolutionised the treatment of schizophrenia and with the development of the anti-psychotic medications, psychiatry began to gain legitimacy as a specialty of medicine and cemented its position in the treatment of mental illness (Bostock 1968; Cade 1979). This pharmacological breakthrough in the treatment of schizophrenia opened up the possibility of discharging inpatients into community based care (Cade 1979; Gilman 1988; Parry Jones 2013).

Alongside developments in pharmacological treatment was the evolution of talking therapies or psychotherapies (Henderson 2000). The dominant aetiological model of mental illness prior to the 1930s was psychobiological. Yet the post war period favoured a psychoanalytic model where psychopathology was understood as arising from a failure to negotiate innate developmental stages successfully, resulting in fixation in, or regression to, earlier developmental stages (Gilman 1988). This encouraged the development of several models of psychotherapy including psychoanalysis (1920s), behavioural therapies (1920s), consumer-centred therapy (1950s), cognitive therapy (1960s), primal therapy (1960s) and cognitive-behavioural therapy (1980s & 1990s), among many others (Cooksey & Brown 1998).

Biological models of psychopathology experienced resurgence in the 1970s (Gilman 1988). Abbott (2014) associates this with attempts by psychiatry to retain jurisdiction over mental health in the face of competition from other professions - such as psychiatric nursing, occupational therapy, psychology and social work, all offering psychotherapy - by realigning itself with medicine. The redefinition of mental illness as a biological condition not only allowed for the reassertion of medical dominance over allied health professions, but also solidified governmental support for psychiatry as a scientific profession (Cooksey & Brown 1998).

The development of anti-depressant, anxiolytic and anti-psychotic drugs cemented the role of psychiatrists as the experts in the treatment of mental illness, reinforced their dominance over the other professional groups and strengthened their sense of professional identity as a medical sub-specialty (Cooksey & Brown 1998). Impenetrable boundaries, secured through registration and credentialing, allowing only psychiatrists the right to prescribe medication further assured them of medical dominance in the treatment of mental illness (Hugman 1991; Johnson 2015). Today, psychiatrists have retained their dominance and power by keeping those boundaries fortified.

2.9 Occupational Therapy

Occupational therapy began to achieve formal recognition as a discipline in the 1940s (Pardy 1937). The birth and development of the profession owes a great deal to the work of auxiliaries. Auxiliaries were groups of volunteers who visited mental asylums from 1878 onwards offering the inmates support and comfort and raising funds for the running of the institutions (Dax 1992). These auxiliaries later formed into associations that advocated

improved services and flexed their political muscle. They eventually evolved into community support services (Dax 1989).

The auxiliaries supported a more humane and holistic approach in the treatment of the mentally ill. They argued that patients being "treated for disordered and broken minds instead of disordered hearts and lungs, and broken bones were responsive to concerts, motor drives, visitors and the facilities for craft work" (Pardy 1937, p. 28). Nursing and artisan staff (Bircanin & Short 1995) introduced the first occupational therapy activities in psychiatric facilities.

The development of occupational therapy as a health discipline can be traced back to a group of professionals in the US who established the National Society for the Promotion of Occupational Therapy (NSPOT) in 1917 (Schwartz 2003, p. 5). Membership of this group included teachers, nurses, architects and physicians and was drawn from a wide range of professions. They advocated for a new profession in which the treatment of those with mental illness would not only be humane but would include activities, which they argued, would have therapeutic benefit (Schwartz 2003). George Barton, a founding member of NSPOT is credited with first using the term, occupational therapy (Christensen 1991). Based on his own personal history with tuberculosis, he believed that activities were as critical to treatment as medication and could be prescribed in a similar manner.

In 1922, the first instructress in occupational therapy was employed at Gartnavel Royal Hospital in Scotland (Adamson 2011). Doreothea Robertson had completed a university course at Cambridge but did not have any formal training in occupational therapy. Her primary duties were to provide various craft activities for the patients physically unable to participate in any work such as gardening, farming, sewing, food preparation or laundry. During the 1930s, increasing numbers of craft instructresses were employed in British hospitals and The Maudsley Hospital commenced training nurses in the use of occupation. In 1937, formal occupational therapy training commenced with the establishment of schools in London and Edinburgh (Adamson 2011).

Psychiatrists working in the Australian mental asylums who had returned from Great Britain began to prescribe occupational activities in their treatment of the mentally ill (Adamson 2011). The popularity of this approach grew and by the early 1940s, there were three overseas-trained occupational therapists working in Australia (Anderson & Bell 1988). The early work of the occupational therapists primarily focused on recreational activities such as

handcrafts, concerts and outings (Cameron n.d). The NSW Hospital Commission initiated the first occupational therapy course in Australia in 1939 (Anderson & Bell 1988). Physicians and other medical staff began the course through the University of Sydney in response to the war emergency needs.

Greater numbers of occupational therapists were employed by psychiatric hospitals in the 1950s and 1960s in response to a growing move away from institutionalisation to one of rehabilitation of the mentally ill. Assisting this change were the physical and psychological demands of soldiers returning from the wars (Anderson & Bell 1988). By the 1950s, occupational therapy had established itself as a profession within psychiatric hospitals and in the treatment of those with mental illness. This led to an expansion in practice (Jackman 2012).

Deinstitutionalisation in the 1980s and 1990s posed challenges for the profession as patients were discharged into the community. The scope of practice changed from inpatient work - consisting of craft, outdoor and domestic activities - to focus on vocational and educational activities, links with social and community groups and establishing community rehabilitation programs (Silove 2002). Occupational therapists began to expand their scope of practice taking on activities traditionally performed by nursing, psychology and social work staff leading to extended scopes of practice and a blurring of boundaries between these professional groups.

2.10 Psychology

As in the US, UK and several European countries, psychology in Australia has roots in the fields of education and philosophy. This is different to occupational therapy and social work, which evolved from nursing (Henderson & Walter 2009). This difference may account for psychology being viewed as somewhat different to other allied health disciplines within both general and mental health services (Henderson 2000).

The birth of the psychology profession in Australia can be attributed to the establishment of three university chairs bearing the title, Mental Philosophy in the last decade of the 19th century. Three scholars from Scotland were appointed to these chairs. Henry Laurie was appointed in 1890 in Melbourne, Francis Anderson in 1890 in Sydney and William Mitchell in 1894 in Adelaide. All three shared a similar educational background and approach. They drew inspiration from post-Darwinian functionalism, which was the driving force behind

Galton's experiments on perceptual and motor performance and human abilities. They also began to promote applied psychology (Turtle 1985).

In 1895, a group of academic scholars led by Anderson and Laurie began to promote psychophysical and psychometrical investigation in Australia. Thus, they established the foundation for empirical psychology in Australia and the profession became associated with researching, quantifying and measuring behaviours and abilities. However, psychology was still viewed as an esoteric branch of philosophy. The recognition of scientific psychology, which was heavily steeped in behaviourism, was not widely accepted by the universities until 1913.

John Smyth established the first experimental psychology laboratory in 1903 at the Melbourne Teachers College. In 1905 Alfred Binet and Theodore Simon, two French psychologists developed the Binet-Simon scale to assess intellectual ability. This heralded the start of standardised psychological testing. About the same time, in 1906, Russian physiologist Ivan Pavlov published the first conditioning studies, the precursor to behaviourism (Turtle 1985).

The establishment of undergraduate courses in psychology occurred between 1920 and 1930. In 1925, Sydney University offered the first major in psychology under the auspices of the Philosophy Department. Similarly, the University of Western Australia offered a major in psychology within the School of Education. However, it was not until 1929 that Sydney University appointed the first Professor of Psychology. In 1930 The University of Western Australia was the first university to offer a Bachelor of Arts (BA) in Psychology. Other universities followed rapidly and today psychology can be studied at 10 universities in NSW alone.

The 1920s also marked the first government appointments of psychologists (Turtle 1985). Psychologists were mainly employed in the tertiary education sector (Taft & Day 1988). Those working outside academia were employed in vocational guidance or cognitive assessment of children with learning disabilities (White, Sheehan & Korboot 1983). The commencement of World War II triggered a rapid acceleration of applied psychology (Turtle 1985). The 1940s and 1950s provided opportunity for exponential growth and development in military and industrial psychology. Psychologists were involved in the assessment and treatment of military personnel. The success of psychology resulted in state governments expanding vocational and educational guidance, counselling and clinical services for children

and adults and establishing industrial psychology facilities in both government and private organisations (Turtle 1985).

During the 1960s, psychology like the other allied health professions, ventured into areas that expanded the profession's scope of practice (Singh et al. 2001). Psychologists gained employment in inpatient mental health facilities and later in outpatient clinics and community health settings. They were employed primarily to conduct neurocognitive assessments, personality assessments, vocational and aptitude assessments, and to perform differential diagnoses (Meadows et al. 2002). Therapy consisted of developing behaviour management programs (i.e. behavioural therapy) with cognitive therapies added later. Today, psychologists employed in inpatient settings have primarily returned to an assessment and behavioural management role with little in the way of psychological therapies, which are delivered, by psychiatric nurses, occupational therapists and social workers depending on the staffing of the service (Larsen 2008).

In summary, the development of the psychology profession in mental health services is distinct from that of social work and occupational therapy, which are deeply rooted in the nursing profession. Psychology owes its genesis to philosophy and education. The discipline grew out of a focus on assessment, learning and behavioural theories which contributed to and influenced the treatment of mental illness. Many of the theoretical and empirical developments in psychology have been borrowed by nursing, occupational therapy and social work. Mainly because they are not protected either by legislative or regulatory processes. This has resulted in role blurring between these disciplines particularly in the delivery of psychosocial and psychological interventions.

2.11 Social Work

The roots of the social work profession can be traced back to the 19th century Industrial Revolution (Woodrofe 1968). The Industrial Revolution heralded widespread technological and scientific advancement as well as migration away from rural settings. An influx of people in urban areas led to a growth in social problems and an increase in social activism. Social activists fuelled by a forceful missionary push from various Protestant denominations tried to ameliorate difficulties arising from poverty, prostitution, disease and other afflictions (Woodrofe 1968). Kathleen Woodrofe (1968) is credited with tracing the historical development of social work in the US and UK whereas John Lawrence is credited with publishing the first historical account of social work in Australia (Mendes 2005).

The first social workers were known as hospital almoners, from the word, alms, meaning charity (Mendes 2005). Often they were drawn from the upper classes and known as "lady almoners". They were the wives and daughters of the medical officers or wealthy patrons of the hospitals concerned with charity. Their positions at various medical institutions were voluntary (Brown 1986). In 1895, The Royal Free Hospital appointed Mary Stewart as the first almoner. She was required to assess whether patients deserved free treatment. Over time, the role expanded to include provision of social programs. By 1905, other hospitals had established similar positions (Woodrofe 1968).

Over in the US, Jane Addams who is regarded as the founding matriarch of social work commenced the US Settlement House movement (Brown 1986). Between 1860 and 1935, rescue societies were formed. These societies assisted women working as prostitutes to find suitable employment to support themselves. Asylums were also being built to take care of those with mental illness (Cade 1979). In 1905, The Massachusetts General Hospital appointed the first professional social worker in the US. Her name was Garnet Pelton and she was a nurse. From 1905 until 1918, most social workers appointed by general hospitals were nurses (Mendes 2005).

The American Association of Hospital Social Workers (AAHSW) was established in 1918. The goal of this group was to formalise social work education and practice. Attempts to legitimise social work as a profession led first to the formation of many schools of social work and second to the formalisation of social work processes (Woodrofe 1968). By 1929, ten universities offered courses in medical social work and social work began to compete with psychology and psychiatry as the complementary discourse to medicine in hospitals (Woodrofe 1968). The development of social work in Australia was based on the British and American models (Scott 2010).

Social workers began to be appointed by Australian hospitals in the 1920s but it was not until 1940 that Sydney University established the first social work degree. The curriculum borrowed heavily from established British and American schools (Woodrofe 1968). Agnes McIntyre was the first trained social worker in Australia. She had trained at St Thomas' Hospital in London. McIntyre was appointed as hospital almoner by the Melbourne Hospital. She later became the inaugural Directress of the Victorian Institute of Hospital Almoners, the organisation responsible for hospital almoner training and social education in Victoria (Lawrence 1965).

Social workers began to be appointed in psychiatric hospitals in the 1950s (Woodrofe 1968). These early social workers were middle class, single women who viewed social work as a vocation rather than a profession (Lawrence 1976). Prior to that attendants and then nurses provided the role performed by social workers. Social workers in psychiatric hospitals were engaged in welfare work (Lawrence 1965). The development of antipsychotic medication saw their duties extend from the charitable to include the provision of accommodation, financial assistance, liaison with government agencies and the provision of psychotherapy.

The development of the social work profession in mental health services, like occupational therapy, owes much to the nursing profession. Nurses advocating for the recognition of economic, social, family and psychological determinants of ill health led to the development of social work as a distinct profession (Scott 2010). Over time, social workers expanded their scope of practice from the charitable to the therapeutic by borrowing heavily from the advances being made in psychology, psychiatry and other mental health professional groups. This significantly increased role blurring between these disciplines in mental health services. Social Work is also the only allied health discipline in the mental health service that has not achieved registration and is viewed as having the most permeable boundaries (King et al. 2018).

The development of the professional groups and tension between them can also be traced by exploring the sociology of the professions.

2.12 Sociology of the Professions

It is recognised that the historical development of professional groups in mental health presented does not do justice to the complexity of socio-political, economic and contextual factors that shaped their evolution (Freidson 1970a; Freidson 1986; King et al. 2018). The history of psychiatry, for example, is presented unproblematically and, while it is not intended, it could be read as a rational progress with the discovery of chlorpromazine. It is acknowledged that every professional history is contested. Within psychiatry, there have been debates within the development of critical psychiatry that take issue with some of the basic tenets of the discipline. However, it is beyond the scope of this work to explore each professional field's history in depth (Saks 1995; Witz 2013). Nevertheless, it is recognised that professional identity may, and does, have different meanings for those within a specific professional group.

Similarly, the development and operation of different theories and models in the understanding and treatment of mental illness, in particular a narrow biomedical model, a psychological model and a social model have also contributed to the tensions that occur between different professional groups (Abbott 2014; Larkin 2002). Central to our understanding of what it means to be a profession is the role of knowledge and expertise (Foucault 1977; King et al. 2018; Saks 2012). Professions typically had a stronger formal knowledge and higher educational base than occupations (Freidson 1986). What this translated into was higher status, financial reward and dominance over other professional groups. Those seen as having more power and expertise could not only direct what they did but they could also direct the activities of others. This is demonstrated by the role of doctors vis a vis other healthcare professions.

Other characteristics such as codes of ethics, altruism, rationality and educational credentials also define professions. Hence, registration and credentialing of knowledge and expertise was a means of strengthening professional power (Foucault 1977; Freidson 1986). Foucault (1977, p.25) described this process as "a selective political incorporation of expertise." Neo-Weberians similarly maintained that we live in a competitive and dynamic world of macro-political power in which professions gain power through the creation of legal boundaries of exclusionary social closure in the marketplace (Saks 2016). Professionalisation is a socio-political process involving the pursuit of power through the protection of knowledge in the market at a macro level (Porter 1978).

For Foucault (1977) the concept of power and knowledge were a single entity. Thus, legal regulation of the boundaries between the professions was to protect professional knowledge and its manifestations of autonomy, rewards, status and power (Fournier & Malin 2000). Fournier and Malin (2000) described the construction of the boundaries between professional groups as a competitive and ongoing process, given that professional jurisdictions are malleable and expandable. Powerful professions, such as medicine, have maintained their power over others by exercising authority and exclusivity over areas of knowledge by engaging in defensive work to protect their boundaries (Rose 1997; Witz 2013). The pursuit of autonomy, opportunities, higher status and social recognition by expansion of professional boundaries has also shaped the evolution of the professional groups in mental health. Eugenicist assumptions about society being a graded hierarchy of natural abilities reflected in the skill level and hence status and power of occupations has also influenced the evolution of professional groups in mental health (Rose & O'Reilly 1997).

2.13 Summary

In summary, this chapter provided a brief historical overview of mental illness and the development of public mental health services in Australia. The chapter then traced the historical development of the five largest clinical groups employed by mental health services: nursing, psychiatry, occupational therapy, psychology and social work. Doing so was in order to understand how the past may have contributed to current role tensions and role blurring between nursing and the allied health disciplines.

By tracing the development of the five largest professional groups employed in public mental health services it can be argued that some professional boundaries are more fixed and immutable while others are flexible and permeable (Corney 1999). Registration is a critical element of professional development and goes beyond merely an education credential. Registration and credentialing can serve as a strong barrier to entry (Nancarrow & Borthwick 2006; King et al. 2018). There is a long history about the efforts by various professional groups to secure regulatory and legislative processes necessitating registration and credentialing, which in turn helps preserve interprofessional boundaries and slows role blurring (Cregard 2018).

Blurred boundaries between the professional groups seem to be most common in the delivery of psychosocial interventions and psychotherapies with each professional group borrowing heavily from the knowledge and interventions developed by the others. This has been illustrated by tracing the historical development of each group in this chapter. The establishment of multi-graded positions has no doubt hastened this blurring of boundaries between the professional groups in public mental health services as well as extended the scope of practice of each professional group (Carpenter et al. 2003).

It is not known what impact this has on the professional identity of these professional groups and on the delivery of appropriate care to consumers of public mental health services. This is important to know because professional identity has been linked to increased job satisfaction, less turnover, professionalism and greater motivation and effort to provide high quality clinical care (Jiang et al. 2017; Molleman & Rink 2015; Sabanciogullari & Dogan 2015). A strong professional identity has been associated with confidence, power and agency (Izadinia 2015). Quality clinical care requires clinicians who possess these attributes. Therefore, being able to develop a better understanding of what factors contribute to and strengthen professional identity is important.

The following chapter examines the factors that contribute to professional identity formation and maintenance. The chapter reviews the literature on tribal, role, professional identity and stakeholder theories and specific versus generic skills. It traces the theoretical development of professional identity; maps the interaction between these theories on professional identity; and reviews the impact that new models of care, changing roles, extended scope of practice and blurring of roles have on the professional identity of mental health staff employed in public mental health services.

3. Theoretical Framework

3.1 The Theoretical Perspective

This chapter explores the psychological construct of professional identity and provides a review of tribal theory, role theory and professional identity theory. The chapter examines how these theories are linked and how they have contributed to our understanding of the development of professional identity. The chapter explores how power, the most salient stakeholder attribute in stakeholder theory, and specific skills interact with membership of a professional tribe and role to contribute to the development and strength of professional identity. A four-factor model of professional identity is developed.

Professional identity is more than a sense of belonging or attachment to a professional group (Bee 2017, Canrinus et al. 2012; Kelchtermans 2012). Figure 3.1 reconceptualises professional identity as a multifactorial concept. The four factors that contribute to strength of professional identity are: belonging (tribal theory), attachment (role theory), power (organisational hierarchy) and activities (discipline specific and generic). Figure 3.1 provides a framework for this thesis and offers a new model of professional identity, the 4FM-PI that is multi-factorial and multidimensional. This model is developed and explained below.

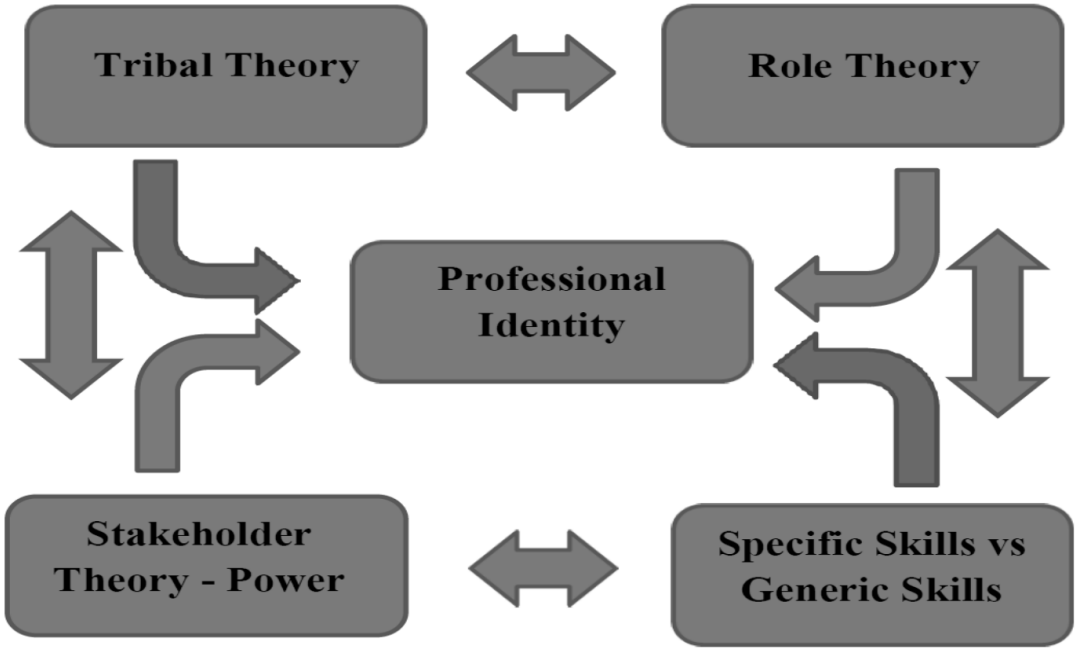


Figure 3. 1: Professional identity model

3.2 A New Model of Professional Identity

Being able to understand and measure professional identity is important. What is currently known about professional identity is that a strong sense of professional identity is central to our understanding of the concept of professionalism (Ashforth, Rogers & Corley 2011; Hafferty 2006; Turner & Knight 2015). Professionals exercise greater skill, care and diligence in performing occupational activities (Creuss et al. 2014). Professional identity has been linked to the core activities and responsibilities of the professional role (Davies 2002; Khalili, Hall & DeLuca 2014, Liu & Tsasis 2017). A strong professional identity has also been associated with: less turnover in teachers, doctors, social workers and nurses (Jiang et al. 2017; Sabanciogullari & Dogan 2015); increased job satisfaction (Sabanciogullari & Dogan 2015); and, greater motivation and effort to provide high quality patient care and optimal performance in multidisciplinary teams (Canrinus et al. 2012; Kelchtermans 2012, Molleman & Rink 2015).

Professionals define themselves by the activities they perform and the work they do (Fitzgerald 2017, Montgomery 1997). This is known as professional role identity (Chreim, Williams, & Hinings 2007; Pratt, Rockmann & Kaufmann 2006; Sartirana, Currie & Noordegraaf 2018). Professional role identity possesses a relational quality in that professional roles are influenced and defined by the role of others (Fitzgerald 2017, Stryker, 2007; Vough et al. 2013). Professional work role and professional identity are symbiotic in nature; one cannot exist without the existence of the other (Reay et al. 2017). Professional work role is defined by a pattern of situated activity (Reay et al. 2017, p.1049). This suggests that any changes to professional work roles are likely to result in changes to strength of professional identity. It also suggests that when professional work roles overlap and become very similar, this can affect professional identity.

The empirical literature on professional identity has promoted a single or two-factor model of the construct (Barbour & Lammers 2015). The instruments currently available to measure professional identity reflect this two-factor conceptualisation. The two factors that have been identified as critical to professional identity formation and maintenance are belonging and attachment (Thornton, Ocasio & Loundsbury 2012). Belonging refers to being a member of a social group or tribe. Attachment refers to a strong sense of affiliation or sense of oneness with the group. Attachment is also concerned with a sense of commitment to the group, the group values, philosophies and role of the group (Ashforth, Harrison & Corley 2008; Brown 2015; Hall 2005). This offers a narrow construction of professional identity that does not

consider the influence of other factors such as power and organisational hierarchy, activities and beliefs (Barbour & Lammers 2015).

Recent studies have called for a multidimensional, multilevel conceptualisation of professional identity (Barbour & Lammers, 2015; Eason et al. 2018; Kyratsis et al. 2017; Thornton, Ocasio & Loundsbury 2012; Vough 2012). Lammers and Garcia (2009) found that the degree to which a professional group is regulated might also affect professional identity. Well-established professional groups, like medicine, were found to have strong professional boundaries as well as a stronger sense of professional identity (Lammers & Garcia 2009; Webb 2016).

The difficulty with this approach however, is that they did not address power and the influence of power on strength of professional identity. Not only is medicine a well-established profession it is also a very powerful profession (Crowe, Clark & Brugha 2017). The medical profession has become even more powerful by creating medical subspecialties, a process known as stratification. Stratification is a strategy used by occupational groups to protect, maintain and expand professional boundaries (Drennan, Gabe, Halter, de Lusignan & Levenson 2017; Montgomery 1990; Nancarrow & Borthwick 2005). Therefore, the significance of power on strength of professional identity must be considered. Von Nordenflycht (2010) argued that any attempt to measure professional identity must also include beliefs. In particular, measurement should include beliefs about professional commitment, self-regulation and autonomy. Professions, like medicine, with the most power tend to have the most influence, autonomy and control over their domain (Lammers et al. 2017).

Others have suggested that in addition to belonging and attachment, professional identity may also be influenced by activities (Brouard, Bujaki, Durocher & Neilson 2017; Lammers, Atouba & Carlson 2013; Vough 2012). The activities performed by one professional group define that group's role in relation to other professional groups (Reay et al. 2017). The activities that define each professional group's role come to be perceived by others as that group's domain or territory. Thus professional identity develops from the activities and the role performed by each professional group. Some researchers have found that professional identity is characterised by group affiliation as well as roles that are defined in part by other roles, for example, the institutional hierarchy of the hospital system (Couldry & Hepp 2018; Newbigging 2004; Pratt, Rockmann & Kaufmann 2006; Thornton, Ocasio & Loundsbury

2012). This implies that the interrelationship between power and activities influences role, which in turn influences professional identity formation and maintenance.

Professional identity is a complex construct. The study of professional identity has moved beyond a two-factor model of the construct. Researchers have recognised the need for a more robust, theoretically driven model of professional identity (Lammers et al. 2017). What is missing from the academic literature is a multifactorial model of professional identity.

The model of professional identity developed here offers a theory-driven, multifactorial and nuanced approach to this construct. *The Four Factor Model of Professional Identity*, or 4FM-PI, has the following components: belonging, attachment, activities and power. The 4FM-PI is a model of professional identity that incorporates belonging (tribal theory) and attachment (role theory), but also recognises the importance of activities (discipline specific or generic activities) and power (organisational hierarchy and role in relation to others).

The development of a four-factor model of professional identity, the 4FM-PI meets a need in the literature calling for an expansion in the construct (Barbour & Lammers 2015; Lammers, Atouba & Carlson 2015). The 4FM-PI recognises that belonging, attachment, power and activities interrelate and reinforce to shape perceptions, attitudes and practices of one's own and other professions. The 4FM-PI expands the current theoretical understanding of professional identity and is a new and unique contribution to the empirical knowledge base. The 4FM-PI has been empirically tested in this thesis.

Newer instruments to measure professional identity that use a multifactorial, multi-dimensional approach also need to be developed. Researchers have recognised this by starting to develop new instruments to measure professional identity in nursing students (Cowin et al. 2013; Worthington et al. 2013) and athletic trainers (Eason et al. 2018).

The rest of this chapter reviews the contribution of tribal theory, role theory, and professional identity theory, power from stakeholder theory, and activities to the development of the 4FM-PI.

3.3 Tribal Theory

The professional groups in healthcare have been described as members of different tribes (Mandy, Milton & Mandy 2004; Weller, Boyd & Cumin 2014; White et al. 2019). A tribe has been defined as a "network of heterogeneous persons linked by a shared passion or emotion" (Cova & Cova 2002, p. 602). Members of a tribe strongly identify as being members of a

tribal group. They are also identified by others as belonging to a tribal group. Multiple tribal groups exist in the world of healthcare. Tribes have gatherings and engage in ritual acts publicly referred to as "anchoring events" (Aubert-Gamet & Cova 1999, p.39). These anchoring events help strengthen their membership, consolidate underlying core group values and provide a mechanism to unify and bond over shared experience.

Similar to tribes, professional groups have their own anchoring events. The medical profession has held grand rounds to bring them together. While open to other professional groups to attend, the focus of these meetings is on medical education and collaboration. Other professional groups have emulated medical grand rounds with their own discipline network meetings. International social work day, psychology week and occupational therapy day are other examples of anchoring events. Each tribe or professional group may also form a sub-culture within the broader cultures of the hospital, the mental health field and the multidisciplinary mental health team (Nightingale 2018; Watts, Robertson & Winter 2013). Each disciplinary tribe strives to protect its professional territory from encroachment, intrusion and colonisation by others (King et al. 2015; McGee-Cooper 2005). This is discussed in more detail below.

3.3.1 The Concept of Territoriality

The concept of territoriality predates human existence. What is known about this concept has been gleaned from animal studies (Baldwin 2007). A territory is defined as a space that has been identified by an individual, or tribe as its exclusive property. It is defended against any threat from others (Beattie 1995). Threat may involve encroachment, intrusion or colonisation. An example of encroachment is one professional group starting to perform an activity deemed the domain of another professional group. An example of encroachment is occupational therapists conducting DBT therapeutic groups considered the domain of psychologists. An example of intrusion is nurses prescribing medication typically the domain of psychiatrists. Colonisation refers to appropriating a domain. An example of colonisation is occupational therapists taking responsibility for the provision of recreational, group and vocational activities that were once the domain of nursing staff in inpatient mental health units.

Territory was classically viewed as a physical space or place. The concept of territory has now evolved and includes real property, such as land and physical possessions, creative, intellectual, artistic and occupational endeavours. From anthropological studies, there are

four salient features of territory (Baldwin 2007; Nolan 2017). First, tribes fight to establish and defend their territory. Second, the possession of territory is associated with power. Third, tribes constantly seek to increase their territory, and therefore their power. Fourth, territorial boundaries must be regularly maintained and reinforced otherwise predators move in. They claim unworked and abandoned areas as their own and wrestle for control of highly desirable areas. This inevitably results in tension and conflict between tribes. This is exactly what happens between the professional groups in the healthcare sector. Conflict arises as the healthcare tribes jostle to expand their territorial claims. Blurred boundaries occur when there is expansion and contraction of territorial borders between the occupational groups in healthcare (Beattie 1995; Nolan 2017).

An example of this is the conflict between doctors and nurses for prescribing rights. Historically, only doctors had the right to prescribe medication. However, nurses viewed this activity as highly desirable because it gave the doctors power. Nurses wanted to increase their occupational territory by intruding onto the doctors' domain. The doctors resisted the nurses' attempts to intrude onto their territory vigorously. Eventually, the nurses were successful because they were able to demonstrate that shortages of psychiatrists in rural and remote regions resulted in areas that were "unworked" or "abandoned" by psychiatrists (Appel & Malcolm 2002; Lim, North & Shaw 2017).

3.3.2 Self-Categorisation

Through a process of self-categorisation, individuals classify themselves into different social and professional categories according to context and environment (Haslam & Turner 1992; Reicher & Hopkins 2016). Healthcare staff classify themselves into professional groups with the main groups being medical, nursing, allied health and corporate. The main clinical groups in mental health services are nursing, occupational therapy, psychiatry, psychology and social work. Self-categorisation creates a sense of belonging and strong identification with that group which in turn provides the individual with benefits including enhanced self-esteem, a positive professional identity, prestige and a sense of strength and solidarity (Atkins 1998; Davies 2002; Hogg 2016).

Tribalism has been used to explain professional differences that have developed because the professional groups have evolved separately and attempted to differentiate their role and skills from the others (Beattie 1995; Saks 2016). Professional boundaries are said to "sharpen the group's identity in the minds of its members and signal the rules of exclusion" (Oliver &

Montgomery 2005, p.1168). Professional differences have established deeply rooted boundaries between the professional groups that are self-serving and territorial (Beattie 1995; Saks 2016). The demarcation of boundaries between professional groups has resulted in interprofessional rivalry, tribalism and stereotypes that can detract from the effective delivery of services (Cook & Stoecker 2014; Hean et al. 2006; Mandy, Milton & Mandy 2004; Foster & Clark 2015). In the process of forging a strong tribal identity, professional groups have created strong stereotypical attitudes about other groups (Carlisle et al. 2004; Carpenter 1995; Cook & Stoecker 2014). Often these attitudes are negative. An example of this is that social workers are perceived as "do-gooders" or "bleeding hearts", occupational therapists as "basket weavers", nurses as "Florence Nightingales," psychiatrists as "neurotic" and psychologists as "shrinks."

Tribes are known to jostle for power and dominance over neighbouring tribes. They are also known to fight over territory. So do the professional groups in mental health (Apker, Propp & Zabava Ford 2005; Cleary 2003; King & Nancarrow 2015). Medicine is the most established of the professional groups in healthcare and is still regarded as the most dominant and powerful tribe (Hafferty & Light 1995; Page & Meerabeau 2004). In the shadow of medical dominance, nursing and allied health have battled for position, territory and negotiating power (Freidson 1970a; Saks 2000; van Bochove, Tonkens, Verplanke & Roggeveen 2018). This battle for position, territory and power between nursing and allied health has contributed to role blurring. Additionally, social rules have shaped the formal/informal status of occupations (Freidson 1970b). Freidson (1986) claimed that the knowledge base and therefore status of an occupational group is heavily marked by inequalities of gender, race, and class, and therefore not free from the culture's stereotypical assumptions.

Historically there has been a well-established and documented hierarchy between doctors and nurses (Coburn 2006; Cockerham 2017; Page & Meerabeau 2004; Willis 2006). The fact that nursing has been a female dominated profession and medicine a male dominated profession has contributed to this (Cleary 2003; Webb 2016). Multidisciplinary teams have presented considerable challenges to the established power relationships in healthcare (Hotho 2008; Nugus et al. 2010; Cockerham 2017). The allied health professions of occupational therapy, psychology and social work (female dominated) have challenged the established power gradients in healthcare. These groups have jostled to establish position and power for themselves in mental health services (King & Nancarrow 2015; Page & Meerabeau 2004).

3.3.3 Professional Socialisation

Through a process of professional socialisation, individuals adopt the norms, values and stereotypes held by other members of a professional group (Mann et al. 2005; Olson, Klupp & Astill-Burt 2016). This suggests that professional identity is a developmental process that is mediated through proximity and exposure to members of the same professional group in addition to education and training. Increased frequency of contact between similar individuals known as homophily strengthens professional socialisation (McPherson, Popielarz & Drobnic 1992; Olson, Klupp & Astill-Burt 2016). For example, clinical supervision and discipline specific network meetings and professional education are all activities that increase contact between members of a professional group and strengthen professional socialisation. Informal activities such as all occupational therapists having lunch together every Thursday and gathering to celebrate birthdays also strengthen professional socialisation.

In mental health services, proximity to other members of the same professional group has been reduced in several ways. First, professional group departments that accommodated all members of a professional group in one physical location have been replaced by virtual departments. Second, staff that work on different inpatient or community multidisciplinary teams have been physically situated within those teams. Third, all amenities are shared by staff. Fourth, mandatory training is interprofessional. The literature has not explored what happens to the professional identity of staff in multidisciplinary teams. It is not known whether they continue to identify with their own professional tribe or whether they identify with both their professional tribe as well as their mental health team tribe.

3.3.4 Disciplinary Tribes, Knowledge and Power

A professional group's classification is linked to that group's knowledge base and the extent to which that knowledge base is agreed upon and explicit (Bernstein 1971; Hordern 2017). Power by that professional group is derived by having control of that knowledge base and control over how and to whom that knowledge is transmitted. That is, "principles of power and social control are realised through educational knowledge codes and through the codes they enter into, and shape, consciousness" (Bernstein 1971, p.54). This means professional boundaries help to achieve this control of knowledge and territory (Clavering & McLaughlin 2007; Hordern 2017). Professional boundaries are constructed in a four-stage process (Oliver & Montgomery 2005). The first stage is known as the nascent moments of boundary construction. The second stage is where the group's core values and activities are communicated widely. The third phase is when group membership is delineated and domain

claimed. The fourth stage involves recognition of the group as a distinct entity by powerful external bodies (Oliver & Montgomery 2005; Montgomery, Lipworth & Fitzgerald 2015).

Membership of a disciplinary tribe involves a deep sense of identification with and allegiance to it. Membership is described as "a way of being in the world," and of taking on a "cultural frame that defines a great part of one's life" (Clark 1963, p.275). Identification with a disciplinary tribe can be manifested in three ways (Becher & Trowler 1996). The first way is with idols. Psychiatrists use pictures of Sigmund Freud, nurses of Florence Nightingale and psychologists of B.F Skinner. The second way is with artefacts. Neuropsychologists use models of the brain; occupational therapists use Allen's cognitive laces; and nurses use the fob watch. The third way is the use of professional language and literature that helps establish the cultural identity of that disciplinary tribe. Use of specialised terms and symbols keeps knowledge within the disciplinary tribe, excludes others and protects the tribe from attack (Becher & Trowler 1996, p.47).

Membership to a disciplinary tribe requires loyalty, specific tribal knowledge passed on by tribal elders and adherence to tribal norms (Trowler, Saunders & Bamber 2012; Tange 2016). The process of induction begins at university and is strengthened and reinforced in the workplace through supervision and mentoring (Filatova, Filatov & Semenova 2017). Boundaries between disciplinary tribes are there to protect territory that is closely guarded (Becher & Trowler 1996; Tange 2016). If left unguarded, territory can be encroached on, invaded and reallocated. Skills, knowledge and language that are within the possession of one disciplinary tribe can be acquired or "poached" by others. Some boundaries are so strongly guarded they are almost impenetrable (Fournier 2000; Niezen & Mathijssen 2014). Medicine has the strongest boundaries of all the professional groups (Clavering & McLaughlin 2007; Touati, Rodríguez, Paquette & Denis 2018). Other boundaries are weakly guarded and permeable. Social work has the weakest boundaries of all the professional groups in the mental health service (Cameron 2011). Considerable poaching occurs across disciplinary knowledge and activities leading to blurred boundaries. The amount of poaching that occurs between professional groups depends on the strength of disciplinary boundaries (Fournier 2000; Touati, Rodríguez, Paquette & Denis 2018).

3.3.5 The Strength of Disciplinary Boundaries

Impermeable boundaries signify tightly knit, convergent disciplinary tribes with a stable and coherently organised body of knowledge. Permeable boundaries are characterised by "loosely

knit, divergent" disciplinary tribes with a "less stable and comparatively open-ended epistemological structure" (Becher & Trowler 1996, p.60). Gender also plays a role in the permeability of disciplinary boundaries (Davies 1995; Watts 2016). Psychiatry is predominantly dominated by males. Social work conversely is dominated by females (Foldy 2003; Watts 2016).

Legal and regulatory frameworks governing membership of a disciplinary tribe can also affect the permeability of its boundaries (Turnbull et al. 2009). The practice of medicine and psychiatry has been regulated for many years. The Royal College of Psychiatry was established in Britain in 1841. In Australia, the Royal Australian and New Zealand College of Psychiatry (RANZCP) was founded in 1946. Social work however remains largely unregulated in Australia. Social workers are not registered and membership to the Australian Association of Social Workers (AASW) is voluntary.

The strength of disciplinary boundaries appears to vary across each discipline. Some boundaries are tightly controlled while others are not. Psychiatry has the most tightly controlled boundaries of the disciplines working in mental health. This is because psychiatry is convergent and tightly knit (Becher & Trowler 1996). Members share common ideologies and values, shared judgments of quality, a sense of tradition and uniqueness, strong use of idols, artefacts and professional language and control of how knowledge is disseminated. This is described as high disciplinary framing (Becher & Trowler 1996). Entry into medicine and psychiatry is difficult. There are few entry pathways and numbers are capped making it exclusive, prestigious and powerful (AMA 2017). Psychiatrists have held on to this power by strongly protecting their boundaries (Witz 2013).

Other disciplinary boundaries are not as tightly controlled (Cameron 2011; Liberatti, Gorli & Scaratti 2016). Social Work, for example, is described as having lower disciplinary framing than psychiatry. Social work boundaries are viewed as permeable. Entry into social work is viewed as easy compared to other healthcare degrees. University entrance scores or ATARS required for entry to a social work degree in NSW, are as low as 55. Numbers are not capped. There are multiple entry pathways into the profession through TAFE (Technical and Further Education) courses in welfare studies. Boundaries that are more permeable are associated with greater risk of disciplinary skills, knowledge and language being poached by others (Malin 2000; Watts 2016). When boundaries are poached prestige, power and exclusivity is lost (Crowe, Clarke & Brugha 2017).

3.3.6 Disciplinary Status, Tribes and Power

The disciplinary tribes have been described as being engaged in a Darwinian struggle to survive, with the strongest and most adaptable winning (Becher 2018; Becher & Trowler 1996). The same can be said of the disciplinary tribes in mental health who jostle for survival, power and dominance (Baldwin 2007). The power of disciplinary tribes has become increasingly related to their contribution to the economy as well as their perceived contribution to patient care (Cannizzo 2018; Henkel 2000). Professional groups who exclusively deliver specialist patient care attain more power, dominance and prestige.

The use of language and specialist titles by disciplines has been described as a strategy to increase power and enhance image (Elzinga 1987; Elzinga 2018). People play word games to improve their status, as do the disciplines. For example, psychologists have introduced terms such as clinical psychologist, forensic psychologist and clinical neuropsychologists to indicate specialised knowledge and skills in an area of practice. These terms also increase their power and elevate the standing of the discipline. Similarly, social workers have introduced terms such as medical social worker, clinical social worker and paediatric social worker.

Medicine has always enjoyed prestige, more so than other health disciplines (Hugman 1991). However, even within medicine there exists a hierarchy between the different specialist areas (Hughes 1958; Medonca & D'Cruz 2018). This is known as stratification (Nancarrow & Borthwick 2005). Within the hospital system, this can be felt profoundly. For example, the neurosurgeons, orthopaedic surgeons and cardiologists are situated at the top of the medical hierarchy. Psychiatry, addiction medicine and sexual health are at the bottom of the medical hierarchy. This may be due to the stigma associated with mental illness, substance abuse and sexually transmitted infections (Hankir, Ventriglio & Bhugra 2017). Perhaps these specialist areas may be seen as dirty work by other members of the medical profession (Hughes 1958; Medonca & D'Cruz 2018). Similarly, in nursing, emergency department, theatres and transplant nursing is at the top of the nursing hierarchy. Geriatric and psychiatric nursing are at the bottom of the hierarchy. This is due to the stigma and negative attitudes associated with these areas of practice (Gouthro 2009; Horsfall, Cleary & Hunt 2010).

Generally, disciplines steeped in hard or pure knowledge such as physics, engineering and medicine are regarded more highly than those disciplines steeped in soft or applied knowledge such as occupational therapy, psychology and social work (Becher 2018; Becher

& Trowler 1996). Within stratified disciplines, specialist skills in some areas are seen as prestigious and others less so. Entry into the prestigious areas is tightly controlled and highly sought. Medicine and nursing are quite stratified disciplines with psychology, occupational therapy and social work less so, but that is changing. Over the last 15 years, these disciplines have also become more stratified. As noted, terms such as paediatric occupational therapist, clinical social worker and forensic psychologist have become more common.

It is widely accepted that medicine enjoys the most power and prestige of all healthcare disciplines. Medicine also has the most fortified and impermeable boundaries. Understanding the relative status and power of the other healthcare groups in relation to medicine is complex but important because power determines the permeability of professional boundaries. The empirical literature has focused attention on the occupational boundary between nursing and medicine (Timmons & East 2011). Studies of occupational boundaries between nursing and allied health or between the allied health occupational groups are absent (Timmons & East 2011).

An exception to this is the following study. Smith and Roberts (2005) found that occupational therapists and physiotherapists who were required to share skills in a community setting became more protective and territorial over their perceived core skills. They argued this illustrates the persistence of professional tribalism. Obviously, both professional groups felt threatened when the other group performed activities they perceived as their domain. Similarly, an earlier study found that occupational boundaries between professional groups on a community mental health team became further entrenched rather than weakened when the clinicians were asked to work generically. The different occupational groups defended their professional skill sets (Brown et al. 2011). A different research study has found that members of multidisciplinary teams maintain an allegiance to their own professional tribe, before identifying with the team (Weller, Boyd & Cumin 2014). They were found to be a collection of individuals with different professional identities; the roles of team members were clearly demarcated in the study with little to no blurring of professional boundaries. Therefore, the study did not address the impact of multi-graded, generic models of care and role blurring on health professionals working in multidisciplinary teams. The literature is absent on whether these clinicians continue to identify as strongly with their own professional tribe.

While doctors retain power and dominance vis-à-vis nurses and allied health professionals, this has changed over the last 30 years (Spurgeon, Clark & Ham 2017). Nursing and allied health were once predominantly female but as more men have entered these professional groups (and broader societal changes have impacted), there has been a significant change in the self-concept and ambitions of students entering these professions. These professional groups and the community as well, have become increasingly more questioning and resentful of the power of doctors (Khalili, Hall & DeLuca 2014).

Stratification within disciplines appears to be part of the quest for recognition. Recognition can take various forms including the use of uniforms. Uniforms are a visual and symbolic representation of membership to an occupational group. Uniforms delineate professional boundaries and demonstrate occupational hierarchies (Clavering & McLaughlin 2007; Weller, Boyd & Cumin 2014). When management in the NHS introduced the same uniform for all healthcare staff in an attempt to remove the occupational boundaries in healthcare, many professions resisted (Timmons & East 2011). This is because "healthcare systems are not monolithic entities but pluralistic organisations in which competing interests jockey for attention" (Hunter 1996, p.799). Professional staff on mental health services are not required to wear uniforms and perhaps this has further contributed to role blurring.

3.3.7 Summary

In summary, members of the professional groups in mental health services can be described as belonging to different disciplinary tribes. Membership of a tribe is one of the factors in the development of professional identity. These disciplinary tribes jostle for power against the other tribes while simultaneously protecting their territory from invasion, encroachment or colonisation. Their territory consists of the knowledge, skills and expertise possessed by each disciplinary group (Young & Muller 2014). Knowledge, skills and expertise define a disciplinary group's role and role is a key factor in professional identity formation. The next section explores role theory.

3.4 Role Theory

Not only does the literature suggest professional groups act like members of a tribe, the literature also suggests that each professional group or tribe engages in activities that are specific to that group (Reay et al. 2017; Stryker & Serpe 1982; Wilberforce et al. 2017). The specific activities performed by each professional group define that groups' role. These

specific disciplinary activities or skills also differentiate one group from the other professional groups (Brookes et al. 2007).

Role theory describes how individuals act in different social contexts and how their actions are perceived and interpreted by those external to the group or profession (Brookes et al. 2007). Different professional groups have their own language, journals, education processes, "tools of the trade," professional associations, values, theoretical perspectives and models of treatment and care (Brookes et al. 2007).

A literature review of electronic databases: Google Scholar, CINAHL, Psychlit and Embase, was undertaken between 1966 – 2006 by Brookes and colleagues (2007). These databases as well as others were then searched from 2007-2017 by the researcher. The database literature search confirmed that much of the work produced on role theory has been theoretical in nature unlike the database searches on tribal, professional identity and stakeholder theories that produced empirical literature. The work on role theory can be broadly divided into three main theoretical groups, namely: (i) social structuralism; (ii) symbolic interactionism; and, (iii) the dramaturgical perspective. Each of these perspectives will be described briefly (Brookes et al. 2007).

3.4.1 Social Structuralism

Social structuralism first emerged in the early twentieth century (Clifford, 2000). This perspective understands role as a function of "society, social systems and the social structure" (Brookes et al. 2007, p. 148). According to social structuralist theory, roles have functional utility. They are performed in a standardised and normative manner. The behaviour of individuals and the roles of professional groups are shaped by social systems. The role of the professional groups in the mental health service is determined by external systems and the structures imposed by the healthcare system (Nancarrow & Borthwick 2005; Bochatay 2018).

For example, the lack of a clinical psychologist on the long-stay rehabilitation unit required nurses, occupational therapists and social workers to perform psychotherapeutic interventions. Thus, the role of these three professional groups became more expansive on the rehabilitation unit. Similarly, on community mental health teams, occupational therapists, psychologists and social workers have been required to take physical measurements such as blood pressure readings, waist circumference and weight. Their role includes monitoring and supervising medication. Yet their colleagues on inpatient units are not required to do so as these activities are perceived to be part of the nurses' role. Therefore, models of care, culture,

skill-mix as well as staff perceptions can contribute to role blurring (King & Nancarrow 2015; Zamanou & Glaser 1994).

3.4.2 Symbolic Interactionism

Symbolic interactionist theory emerged in the 1930s. This theory holds that all communication is symbolic and informed by interaction and meaning (Larsen & Wright 1986). A major contributor to this perspective was Mead (1934), a cultural anthropologist. Mead (1934) was curious about the "relationships between mind, self and understanding human nature in terms of groups and society" (Brookes et al. 2007, p.148). Social interactionism is primarily concerned with the social interactions between people in achieving desired outcomes. Roles are conceptualised as interactions between what one individual does and what other individuals do (Lambert & Lambert 1981; Harré 2015). According to this view, roles define professional groups and there is a clear demarcation between the role of one professional group in relation to another professional group.

Each professional group is distinguished from the other professional groups according to role. For example, the role of nurses is medication and the physical care of patients. The occupational therapy role is concerned with enhancing patients' daily functioning. The psychiatry role is the psychiatric, medical and legal care of patients. The psychology role is the delivery of psychological interventions. The social work role is concerned with advocating for patients with external providers regarding legal, financial, daily living and accommodation needs.

3.4.3 Dramaturgical Perspective

Moreno (1934), a social psychologist is associated with the dramaturgical perspective. Moreno was inspired by the work of Mead (1934) and other symbolic interactionist theorists. Moreno expanded Mead's (1934) theory of role taking by introducing role-playing. Role taking also known as perspective taking refers to the ability to understand thoughts and emotions from the perspective of another (Mead 1934). It is a cognitive developmental process. Role-playing refers to the adoption of a role in a particular setting, whether it be occupational or recreational (Moreno 1934). Moreno (1934) proposed that role-playing could be used to enhance learning and role performance. According to the dramaturgical perspective, each professional group plays a role that differentiates it from other professional groups. For example, psychiatrists take on a leadership role across different settings and teams in the mental health service (Sonnenberg, Pritchard-Wiart & Busari 2018). In taking on

that role, they always delegate minute taking at meetings and other administrative tasks to other disciplines.

The doctor's stethoscope, the nurse's bedpan and the psychologist's IQ test are the props necessary for the professional roles they play (Timmons & East 2011; Cersosimo 2019). In mental health services, nurses have syringes and psychiatrists medication charts or prescription pads. Occupational therapists, psychologists and social workers are not as easily identified. They do not have such visible professional props. Uniforms can also assist professional groups in the roles they play. Uniforms have been found to symbolise professionalism, status, power and identity (Jenkins 2014). Despite the controversy related to health staff wearing uniforms, both patients and staff have indicated a preference for them (Kucuk et al. 2015; Pearson et al. 2001).

Overall, the literature on role theory has been marked by limited contemporary research in healthcare settings (Brookes et al. 2007). The most recently published studies have either explored the application of role theory to doctoral dissertations or in relation to the development of professional roles among nurses and doctors. One study examined role theory in relation to the administration of occupational therapy education (Miller 1982). The database searches did not retrieve any appropriate studies examining role theory in relation to occupational therapy, psychology or social work.

Role theory has been used to study the role of community nurses (Brookes et al. 2007). Role theory concepts, such as the five propositions of role theory have been applied in exploring the transition for nurses from hospital to community and home-based nursing care (Murray 1998). The five propositions of role theory were originally developed by Biddle (1979). They are; behaviours follow patterns and will always occur in certain contexts; roles define individuals who share a common identity; individuals recognise roles and, to some extent, are governed by them; roles persist because they are embedded within larger social structures and have functions; and, people must be taught roles. Being able to recognise and teach roles however becomes problematic when role blurring occurs.

The literature on role theory has also explored the related concepts of role ambiguity, conflict, overload, stress and strain (Brookes et al. 2007; Watts 2016). Role ambiguity occurs when roles and expectations are unclear (Acker 2003). For example, generic roles in community mental health services challenge the traditional roles and scopes of practice of professional groups, leading to role blurring and uncertainty about roles (McKenna, Keeney

& Bradley 2003). Role conflict arises when the individual attempts to reconcile incompatible roles. By meeting one set of expectations another set are unable to be fulfilled (Acker 2003; Yanchus, Periard & Osatuke 2017). This may occur when a member of a professional group is engaged in tasks of a generic nature and does not have an opportunity to perform tasks requiring discipline specific skills (Bull, Hargreaves & Shakespeare 2008; Webber & Nathan 2010). For example, when completing paperwork for a breach of a community treatment order (CTO) prevents a psychologist from delivering psychological interventions. Role overload occurs when an individual's capacity to meet the demands of a role has been compromised (Acker 2003; Hardy & Conway 1988; Yanchus, Periard & Osatuke 2017). Role stress occurs when the requirements of a role have been inadequately defined, are conflicting or cannot be achieved (Hardy & Conway 1988). This can then lead to role strain, which is characterised, by a combination of anxiety, tension and frustration.

3.4.4 Summary

As professional groups navigate the changing healthcare landscape, part of that process requires exploration and redefinition of their roles (Frost, Robinson & Anning 2005; Hill-Smith et al. 2012). With greater emphasis on generic models of care and a prevailing philosophy of "we are all the same" when advertising for mental health clinicians, individuals are challenged to assume new work patterns or environments, take on activities they consider beyond the scope of their practice and re-examine their professional roles (Stets & Burke 2000). When role blurring occurs between professional groups, it can affect professional identity (McNeil, Mitchell & Parker 2014). The next section explores professional identity theory.

3.5 Professional Identity Theory

Professional identity is developmental and influenced by professional role, identification with, and membership of a professional group or tribe (Weaver et al. 2011; Webb 2016). Professional identity is "the relatively stable and enduring constellation of attributes, beliefs, values, motives and experiences in terms of which people define themselves in a professional role for achieving both objective and subjective success" (Ibarra 1999, pp. 764-765).

Schein (1978) described professional identity as a sub-type of social identity characterised by interactions between groups in the workplace. It relates to how members of one professional group differentiate themselves from other professional groups, that is, through role and the performance of discipline specific activities (Ibarra & Petriglieri 2010; Nolan 2017).

Professional identity is said to develop incrementally and involves acquiring the attitudes, values and professional skills that distinguish one professional group from another (Schein 1978). For example, social justice is one of the core values of social work practice (Banks 2012; Webb 2016). Each individual is considered to deserve the same social, economic and political opportunities in life (Morgaine 2014). Social work as a discipline was founded on advocacy for the most vulnerable members of society. Social workers advocated for the poor and destitute when no others would. They continue to do so because the core value of social justice has informed and shaped their practice, professional role and identity. Social workers continue to challenge the established order. They view advocacy for marginalised members of society as a core principle and skill that is embedded within social work practice and their professional identity (Lee & Hudson 2017).

Professional socialisation describes the process by which individuals acquire the attributes and identity that characterise members of a particular profession. It involves the "internalisation of the values and norms of the group into the person's own behaviour and self-conception" (Cohen 1981, p.14). The socialisation process is said to commence at university and is nurtured and reinforced through supervision, and mentoring in the work environment. Significant literature in this field has been on the professional socialisation of doctors and nurses (McKimm & Wilkinson 2015; Price, Doucet & Hall 2014). The literature on the professional socialisation of allied health professionals is not as expansive.

3.5.1. Social Identity Theory

Social identity theory posits that people have multiple social identities determined by membership of various social groups. Professional identity constitutes one of these social identities (Hogg 2016; Morrison & O'Boyle 2008). Professional identity is concerned with group interactions in the workplace and the processes whereby professional groups differentiate themselves from others. Self-categorisation theory is concerned with the behavioural and cognitive processes undertaken by individuals as they begin to perceive themselves as members of a group with a common identity (Hogg 2016; Weaver et al. 2011).

In social identity theory, individuals are said to move through three distinct stages. The first stage is known as categorisation. During this stage, individuals self-categorise into natural groupings. The second phase is known as identification. Here individuals begin to identify members of the same professional group as similar to themselves and members of other professional groups as different. The third stage is known as comparison. This is where

individuals compare themselves with other professional groups and view themselves as belonging to a professional group that is positively perceived (Morrison & O'Boyle 2008). Furthermore, social identity theory holds that strength of social identity determines the attitudes and behaviours of one group towards another (Turner 1999).

The development of professional identity is incremental and gradual allowing the individual time to learn, absorb, identify and commit to the core values of the profession. It is also continuously emerging and shaped by organisational processes (Nylen 2018). Therefore, the blurring of professional roles may also affect the development and strength of professional identity (Schein 1978). For example, a new graduate on a community mental health team required to do generic work is exposed to other generic mental health workers. They are required to learn from, identify with and commit to the core values of the multidisciplinary team. These values may conflict with the core values of their discipline. A social worker who understands mental illness from a social justice perspective and works within a strengths based model may struggle to work within a medical model that focuses on symptom management.

Cognitive flexibility is a factor in the development of a strong professional identity (Martin & Anderson 1998, p.4). Cognitive flexibility is the ability to organise knowledge in response to environmental demands. Knowledge construction is part of a developmental process whereby professionals gain expertise. Knowledge construction requires cognitive flexibility. Individuals with cognitive flexibility are therefore more likely to develop a strong sense of professional identity. Cognitive flexibility has three elements. The first element is awareness and describes an individual's ability to see multiple options in any given situation. The second is willingness to be flexible and adaptive. The third element is self-efficacy, which refers to an individual's belief in their capacity to be flexible (Martin & Anderson 1998, p.3).

3.5.2 Interprofessional Practice and Professional Identity Threat

Interprofessional practice (IPP) continues to be promoted as a model of healthcare in Australia and internationally (Chesters & Burley 2011; Clark & Drinka 2016; Malcolm et al. 2017). IPP has been defined as collaboration between professional groups across professional boundaries to resolve complex presentations and deliver integrated care (McNeil, Mitchell & Parker 2014). It is a model that harnesses the unique skill set of various disciplines to deliver evidence-based, quality patient care (Hoffman et al. 2008; Malcolm et al. 2017). Successful application of the IPP model has resulted in increased staff satisfaction and hospital

efficiency, better patient outcomes and reduced service duplication (Long et al. 2006; McNeil Mitchell & Parker 2014).

Conversely, IPP has been associated with increased competition and conflict between professional groups as well as withholding of information (Adams 2004; Caldwell & Atwal 2003). When IPP has not worked, the failure has been attributed to threats to professional boundaries. Clinicians have generally accepted some overlap in their roles but genericism has triggered concerns about role, scope of practice and professional identity (Booth & Hewison 2002; Cameron 2011; McNeil, Mitchell & Parker 2015). For example, when occupational therapists on inpatient units began to refer to aspects of their functional assessments as cognitive assessments this evoked strong feelings of territoriality in neuropsychologists who regarded this as a boundary violation.

Threat to professional identity is strongest under four conditions. First, professional identity is threatened when professional groups receive differential treatment. Second, when the values between professional groups are different. Third, where there are attempts at assimilation, and fourth, where there is perceived insult (McNeil, Mitchell & Parker 2014). Threat to professional identity can produce faultlines in interprofessional teams and impair team functioning. Professional identity conflicts between professional groups are triggered by medical dominance, conflict between different models of care, role blurring and the emergence of new health occupations (Cook & Stoecker 2014).

Social identity and social categorization theories indicate that occupational diversity within clinical teams can create an environment whereby clinicians categorise those that are similar as in-group and those that are dissimilar as out-group. When this occurs, identity-based subgroups are formed and the potential for competition and conflict is increased (Mitchell, Parker & Giles 2011).

Professional groups in the healthcare sector are educated in separate schools and faculties and therefore subscribe to different theories and practice frameworks. These differences are reinforced by the process of professional socialisation (Johnson 2016). This means that individuals develop a strong identification with their disciplinary group (Miscenko & Day 2016). Individuals often mourn the loss of their professional identity on retirement because it is one of their strongest social identities (Loe & Johnston 2016; Silver et al. 2016; Willard & Lavallee 2016). It has been found to be stronger than their identity based on age, gender or culture (Adams et al. 2006).

The greatest threat to professional identity occurs when clinicians perceive they have been marginalised or when their professional role and skills are devalued (Hoyt & Murphy 2016; Steele, Spencer & Aronson 2002). For example, allied health disciplines can feel marginalised and their skills devalued under a medical model that prioritises symptom management and the physical care of patients. Multi-graded positions and role blurring between disciplines can also trigger professional identity threat.

Within interprofessional teams, stereotyped and negative perceptions of each other's roles can impede team functioning (Hoyt & Murphy 2016; Lingard et al. 2003). Social workers whose role it is to advocate for the appropriate placement of patients may be unfairly judged as obstructive by psychiatrists whose role it is to discharge patients once their mental state has stabilised. Conflict that occurs between professional groups reflects both current tensions as well as underlying historical conflicts. Historical tensions can intensify professional identity threat and strengthen stereotypes of out-group members (Lingard et al. 2003; Stensaker 2015).

The professional groups in healthcare have been described as tribes competing against each other for territory and power. Each professional group protects its own territory while simultaneously attempting to expand its role and scope of practice (Coburn 2006; Liberatti, Gorli & Scarratti 2016). However, changes in the scope of practice of one professional group are often experienced as an intrusion by neighbouring groups and a threat to professional identity (McNeil, Mitchell & Parker 2014). For example, occupational therapists delivering CBT increased feelings of professional identity threat for psychologists. Similarly, nurse practitioners seeking prescription rights increased feelings of professional identity threat for psychiatrists.

3.5.3 Faultlines

Lau and Murnighan (1998) coined the term faultlines. Faultlines are defined as "hypothetical dividing lines that may split a group into subgroups based on one or more attributes" (Lau & Murnighan 1998, p.328). Faultlines explain how differences between professional groups may engender conflict within a team. One of the most common faultlines is the perception of preferential treatment (Lau & Murnighan 1998; Thatcher, Meister & Park 2016). A professional group that receives preferential treatment in terms of status, remuneration, recognition or opportunities is likely to trigger professional identity threat in other professional groups (Bezrukova et al. 2016).

Doctors have traditionally been acknowledged as the most powerful professional group in the healthcare setting (Johnson 2016). Doctors enjoy social, economic and political advantage over the other healthcare groups. Medical time is valued above that of nursing and allied health professionals (Long et al. 2006, Schofield 2009). Even children on paediatric wards were able to recognise that a hierarchy existed within the multidisciplinary team (Holyoake 1999). Surgeons' time was viewed as most valuable within the hospital hierarchy, then other medical specialties, physiotherapists, occupational therapists, dietitians, social workers, nurses and last peer support workers (Long et al. 2006, p.513). This hierarchy is also evident in mental health services where the psychiatrists' time is seen as most valuable. Patients are regularly withdrawn from groups and assessments with allied health clinicians if a psychiatrist wants to complete a psychiatric review. Differential treatment triggers professional identity threat and can split teams along professional identity faultlines (Schofield 2009; Thatcher, Meister & Park 2016).).

3.5.4 Blurred Boundaries

Role blurring associated with multi-graded positions has also triggered professional identity threat among clinicians. This is because multi-graded positions are perceived as deskilling and devaluing the unique skills of each professional group. Generic roles have been construed as an insult to the traditional health professions because they encourage overlapping areas of practice and unclear professional boundaries that result in tension between the professional groups (Cameron 2011; Hoyt & Murphy 2016).

The creation of new health occupations can trigger professional identity threat especially when they appear to encroach on the domains of the established professional groups. For example, The Australian Medical Association (AMA) felt threatened by the introduction of nurse practitioners and vigorously objected to them being given prescription rights (AMA 2005a, 2005b, 2017). The AMA held that nurses were not an adequate substitute for doctors, had inferior training and they could not offer the same standard of care. Doctors wanted to be the only profession with prescription rights. Yet today, nurse practitioners are located within emergency departments to triage mental health presentations.

Research on professional identity has focused predominantly on the theoretical development of the concept and investigating the development of professional identity in doctors and nurses (Hallam 2000; Hotho 2008; Kreindler et al. 2012). Fewer studies have explored the development of professional identity in allied health professionals (Filatova et al. 2017;

Turner & Knight 2015; Webb 2016). There do not appear to be any studies that have explored professional identity in mental health service staff, other than nurses (Hercelinskyj et al. 2014). This is a significant omission, as the impact of role blurring on professional identity in mental health staff is not clearly understood. Recent studies suggest that strength of professional identity is associated with increased job satisfaction, less staff turnover, an increased sense of professionalism and greater motivation and effort to provide high quality clinical care (Jiang et al. 2017; Molleman & Rink 2015; Sabanciogullari & Dogan 2015). A better understanding of the impact of blurred boundaries on professional identity has the potential to change the delivery of services to a vulnerable population.

Multiple mentoring relationships have been found to foster the development of professional identity (Dobrow & Higgins 2005; Singh, Vinnicombe & James 2006). Individuals with access to a wider range of role models increase their chances of successful professional adaptation (Ibarra 1999). Pratt, Rockmann and Kaufmann (2006) found the development of professional identity in medical students occurred within the context of work-identity integrity violations. These are mismatches between how doctors see themselves and what they do.

Medical students were found to be more socially exclusive than other students (Blakey et al. 2008). This social exclusiveness was linked to the development of a stronger professional identity in doctors. While medical students endorsed teamwork skills, they adhered to a more exclusive style of learning than nurses (Creuss et al. 2014; Creuss et al. 2015; Morison & O'Boyle 2008). These findings suggest that being socially exclusive and having a socially exclusive learning style may be linked to strength of professional identity. However, the studies did not compare medical students to allied health students. It is not known whether a more inclusive learning style in nursing and allied health disciplines contributes to role blurring.

Weaver and colleagues (2011) found medical students were professionally inclusive but socially exclusive. Not only did they form strong bonds with other medical students as well as other doctors, they socially excluded other students on campus and later in the work environment. This professional inclusivity and social exclusivity that commences at university for medical students may contribute to medical dominance and power in most areas of healthcare, including mental health services (Weaver et al. 2011).

The term creeping genericism is used to refer to the role blurring that has occurred in community mental health teams (Brown, Crawford & Darongkamas 2001). Creeping genericism has been identified as a source of conflict and role stress (Best & Williams 2019; Carpenter et al. 2003). Other sources of team conflict have been lack of role clarity, professional boundaries, scope of practice and competency and accountability (Brown et al. 2011). The lack of clearly delineated role boundaries and clear communication in multidisciplinary teams has been correlated with role stress and tension between professional groups (Schofield & Amodeo 1999; Robinson & Cottrell 2005; Verhovsek, Byington & Deshkulkarni 2010).

The identity of psychiatric nurses was more clearly defined when working in psychiatric hospitals and inpatient units (Crawford, Brown & Majomi 2007). The move into community nursing saw the professional identity of mental health nurses become diversified and blurred with other professional groups. This resulted in burnout and increased stress that could not always be modified with clinical supervision (Burnard et al. 2003). Role blurring was also associated with elevated levels of stress in community occupational therapists and social workers (Bull, Hargreaves & Shakespeare 2008; Webber & Nathan 2010). The literature however has not adequately explored professional identity development, or strength of professional identity, in allied health staff and psychiatrists on inpatient or community mental health teams.

A relationship has been found between public image, self-concept and the development of professional identity in nursing (Hoeve, Jansen & Roodbol 2014). The public image of nursing is inconsistent. It has been largely influenced by stereotypes in the media. During different periods in history, nurses have been stereotyped as angels of mercy (1854-1819), heroines (1930-1945) and sex objects (1960-1982). Similarly, other professional groups in mental health services that have also been stereotyped according to task or role. Occupational therapists have been pejoratively referred to as “basket weavers” psychiatrists and psychologists as “shrinks” or “quacks” and social workers as “do-gooders” (Dominelli 2018; Hankir, Ventriglio & Bughra 2017; Hoffman 2015; Williams 2015).

The literature generally reports negative effects of role blurring (Brown et al 2011; Bull, Hargreaves & Shakespeare 2008; Saks 2016; Webber & Nathan 2010). Role blurring has resulted in role ambiguity and conflict in team members torn between their identification with their own discipline and their allegiance to the multidisciplinary team. The response from

some clinicians has been to adhere to discipline specific activities in an effort to preserve their own professional identity (Brown, Crawford & Darongkamas 2001). Case management and multi-graded positions have produced greater ambiguity for mental health nurses (Hercelinskyj et al. 2014; McNeil, Mitchell & Parker 2014).

However, positive effects of role blurring have been reported (Brown, Crawford & Darongkamas 2001; Hercelinskyj et al. 2014). Mental health nurses on community teams have reported several benefits of working in multidisciplinary teams. They valued the collegial atmosphere, increased scope of practice and opportunity to learn from other professional groups (Brown, Crawford & Darongkamas 2001; Hercelinskyj et al. 2014). Few studies have examined the impact of role blurring on professional identity in allied health. The relationship between time spent performing discipline specific activities and strength of professional identity has not been studied.

Professional identity is developmental. Research suggests professional identity is evident before students commence their university courses (Adams et al. 2006). Physiotherapy students have been found to display the highest levels of professional identity, followed by midwifery and occupational therapy students (Adams et al. 2006). Medical students ranked fourth while social work students were found to display the lowest levels of professional identity. Psychology students were not included in the study. However, the study made no comparison between measures of professional identity at the commencement and completion of university training. If professional identity is developmental then it would be expected to increase over time. Yet professional identity was found to decrease for nursing students between years one and three of their training (Cowin et al. 2013). No explanation was given. Strength of professional identity in mental health staff, other than nursing, has not been explored or measured. Similarly, there is a literature gap on strength of professional identity between inpatient and community mental health staff.

3.5.5 Summary

Professional identity threat is triggered by the blurring of roles and overlapping areas of practice, particularly in nursing and allied health (Cameron 2011; Foldy 2003). When roles become blurred, tension and struggles for power and dominance between the professional groups ensue (Becher 1994). Power is associated with strong and impermeable professional boundaries and an increased capacity to protect tribal territory from invasion by others. As such, power has an important role in professional identity formation. Each professional group

is a stakeholder in the mental health service and responsible for the delivery of healthcare to consumers. As such, the professional groups in mental health services jostle to maintain their roles, their distinct identities and dominance or power over the others (Nugus et al. 2010; Fitzgerald 2017). Stakeholder theory (Mitchell, Agle & Wood 1997) is useful in exploring power relationships between the professional groups in mental health and identifying which groups are perceived as most powerful and why. The next section examines power and stakeholder theory.

3.6 Stakeholder Theory

Freeman (1984) is responsible for introducing stakeholder theory. He defined stakeholders as "any group or individual who can affect or is affected by the achievement of the organisation's objectives" (Freeman 1984, p.46). There are many other definitions of stakeholder (Miles 2017). However, this definition is adopted because it is the most direct, inclusive and widely accepted (Hasnas 2013; Jones, Phelps & Bigley 2007). Stakeholders in healthcare include, among others, patients, consumers, carers, the federal, state and local governments, the boards of each LHN, the chief executives (CEs), senior managers, policy makers, the industrial unions, Australian Health Practitioners Regulation Agency (AHPRA), professional organisations, the media, and environmental, domestic and support services staff.

Each stakeholder has the capacity to affect and to be affected by the organisation's objectives. The ethical branch of stakeholder theory suggests all stakeholders should be treated equally (Deegan 2014). However, some stakeholders have more power than others (Cregard 2018; Fernando & Lawrence 2014; Johnson 2016). Powerful stakeholders control the resources that are critically required by the organisation (Boesso & Kumar 2016). Therefore, most organisations tend to prioritise the demands of dominant, powerful stakeholders (Sen & Cowley 2013). Doctors and nurses are the most powerful stakeholders in the healthcare sector (Johnson 2016).

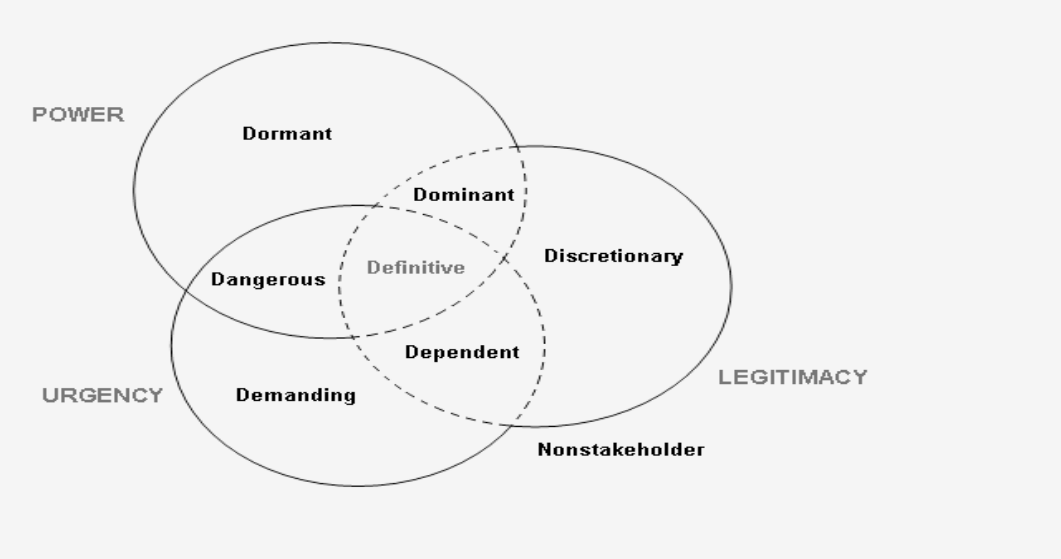
3.6.1 Power, Urgency and Legitimacy

A major development in stakeholder theory has been identifying the factors that contribute to stakeholder salience. Salience is defined as the "degree to which managers give priority to competing stakeholder claims" (Eesley & Lenox 2006, p.766).

Mitchell, Agle and Wood (1997) identified three stakeholder attributes that determine stakeholder salience to managers in any organisation. The three stakeholder attributes are power, legitimacy and urgency. They postulated that stakeholders with the most attributes are the most salient stakeholders to management (Mitchell, Agle & Wood, 1997). Figure 3.2 presents Mitchell and colleagues' (1997) model of stakeholder attributes.

Figure 3. 2: Model of stakeholder attributes

Source: Mitchell, Agle & Wood (1997, p. 874)



According to this model, power is defined as "the ability of those who possess power to bring about the outcomes they desire" (Mitchell, Agle & Wood, 1997, p.86). More specifically power is also professional dominance according to Freidson (1970a). It is the authority to direct the work of other professional groups while concomitantly, not having your professional group's work overseen by other professions. This epitomises the position of doctors vis a vis other healthcare professions (Freidson 1970a). Legitimacy is understood as "a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman 1995, p.574). Urgency is "the degree to which stakeholder claims call for immediate attention" (Mitchell, Agle & Wood 1997, p.867). Urgency has two components, time sensitivity and criticality. The first is the degree to which a delay by management in responding to a claim is unacceptable to the stakeholder. The second refers to the degree of importance of the claim.

The model identifies four stakeholder types - latent, expectant, definitive and non-stakeholder – with eight sub-types across them (Figure 3.2). However, research suggests the majority of stakeholders belong to the definitive, dominant or dormant categories (Parent & Deephouse 2007). Little support was found for the other five stakeholder sub-types.

Stakeholders possessing one attribute are known as latent stakeholders and have low stakeholder salience. There are three types of latent stakeholder: dormant, discretionary and demanding. Dormant stakeholders possess power but lack legitimacy and urgency. An example of a dormant stakeholder in the mental health service is another large government organisation such as an employment service. Discretionary stakeholders possess legitimacy but lack power and urgency. An example of a discretionary stakeholder is a consumer's carer. Demanding stakeholders possess urgency but lack power and legitimacy. They are often described as bothersome but not dangerous. An example of a demanding stakeholder is a mental health advocacy group calling for a ban on the use of antipsychotic medication.

Stakeholders with two of the attributes are sub-classified as expectant stakeholders and have moderate stakeholder salience (Mitchell, Agle & Wood 1997). There are three types of expectant stakeholders: dominant, dependent and dangerous. Dominant stakeholders have power and legitimacy but their claims are not urgent. An example of a dominant stakeholder in mental health services is the media. Dependent stakeholders are legitimate and have urgent claims but lack power. Examples of dependent stakeholders are consumers and allied health staff. Dangerous stakeholders are those that are characterised by power and urgency but lack legitimacy. This type of stakeholder is often violent, coercive and dangerous. Unions and terrorist organisations fall within this sub-category of stakeholder.

Stakeholders possessing all three attributes are known as definitive stakeholders and according to the model have the highest degree of salience (Mitchell, Agle & Wood 1997). Doctors and nurses are definitive stakeholders. They represent a greater proportion of staff employed by mental health services. They have the most power to affect the achievement of the organisation's objectives. They are supported by very powerful unions, such as the AMA and the Nursing and Midwives Association. They also control the resources that are critical to the delivery of healthcare. The eighth category is a non-stakeholder. A non-stakeholder does not possess any of the three stakeholder attributes (Mitchell, Agle & Wood 1997. This stakeholder has no power and no legitimate or urgent claims.

In terms of the professional groups in public mental health, psychiatrists are definitive stakeholders because they possess all three attributes. Doctors have always been the most powerful and dominant group in the hospital hierarchy (Cregard 2018; Johnson 2016). Nurses are difficult to categorise. Nurses can be described as either definitive or dependent stakeholders. While nurses as individuals may not be perceived as powerful, collectively they are a powerful professional group as they have strength in numbers. They represent over 50% of the healthcare workforce (AIHW 2016). Their industrial rights are protected by a very strong union.

Allied health clinicians can be described as dependent stakeholders. Normally, they do not possess all three stakeholder attributes. Allied health clinicians possess legitimacy and urgency. However, they are not perceived as being powerful because they are a small group that is not as cohesive as the name suggests (Baker et al. 2011). Allied health represents about 20% of the healthcare workforce and 23 professional groups (AIHW 2016). The different professional groups in allied health are competitive and act like tribes jostling for power and territory.

There is strong support for the Mitchell model (1977) of stakeholder identification and salience in the academic literature. Page (2002) developed a process for determining organisation stakeholder salience (DOSS) in public health. DOSS is a four-step process that assists managers in ranking stakeholders. The stakeholder ranks are then incorporated in the day-to-day management of the organisation. They are also utilised in strategic planning.

There has been a strong push for recognition of the natural environment as a stakeholder and for the addition of proximity as a fourth stakeholder attribute (Driscoll & Starik 2004). Others have argued for the recognition of secondary stakeholders (Eesley & Lennox 2006). Secondary stakeholders are external to the organisation and may include government departments, religious organisations and lobby groups. While an organisation many not be contractually bound to these secondary stakeholders, they may still exert a powerful influence. For example, lobby groups in the mental health area exert a very powerful influence on service delivery and the protection of consumer rights (Berry 2010).

Power had the most profound effect on salience followed by urgency and then legitimacy (Parent & Deephouse 2007). Powerful stakeholders control the resources that are seen as critical by an organisation (Cregard 2018; Boesso & Kumar 2016). For example, psychiatrists control decision-making regarding admissions and discharges, diagnoses and medication

prescribing. These are perceived to be critical resources in the delivery of mental healthcare to consumers. Therefore, the mental health service prioritises the demands of this dominant and powerful stakeholder group (Cregard 2018; Sen & Cowley 2013).

Power can be categorised as coercive, utilitarian or normative (Etzioni 1964). Coercive power includes the ability to fire, demote and withdraw privileges. Utilitarian power is concerned with rewards and punishments. Normative power is based on a system of shared values (Etzioni 1964). The most salient stakeholders possess all three types of power (Parent & Deephouse 2007). However, utilitarian power has been found to be more powerful than normative or coercive power.

The researcher contends that psychiatrists possess all three types of power (Niezen & Mathijssen 2014; Sauer 2015). Psychiatrists possess coercive power in that they can withdraw privileges, delay discharge and make final decisions regarding treatment. They have utilitarian power. They can reward or punish consumers and other team members. They also possess normative power. The medical model dominates the delivery of care in mental health services. Nursing and allied health are less powerful groups. They have not been able to protect their professional boundaries as well as the psychiatrists (Webb 2016). This inability to protect their boundaries has contributed to the blurring of roles and jostling for power and territory between these four professional groups (Witz 2013).

Power can also be gained through stakeholder alliances (Neville & Menguç 2006). For example, psychology as a professional group on its own does not possess significant power. As part of a larger allied health group, however, it engages in normative power, negotiating with psychiatry around a system of shared values. The creation of stakeholder alliances and normative power between the professional groups in mental health is seen in negotiations regarding consumer treatment and care (Nugus et al. 2010). For example, when the researcher had concerns about a consumer that posed significant risk to the community being discharged from hospital a stakeholder alliance was formed with nursing, occupational therapy and social work colleagues to convince the psychiatrist to reconsider. This example also demonstrates that the salience of the claim may be different from the salience of the stakeholder (Eesley & Lenox 2006). The salience of a claim is affected by several factors, including the decision maker's perception (Agle, Mitchell & Sonnenfeld 1999; Jones, Phelps & Bigley 2007; Parent & Deephouse, 2007; Pfarrer et al. 2008).

3.6.2 Limitations of Stakeholder Theory

A significant weakness of Mitchell and colleagues' (1997) stakeholder theory is that salience is determined by an accumulation of the three attributes. This understanding implies that definitive stakeholders are the most important. However, defining salience by tallying the number of stakeholder attributes is inaccurate because this approach does not distinguish between the very and less powerful stakeholders (Page 2002; Neville, Bell & Whitwell 2011). Power is the most salient of the three stakeholder attributes (Fernando & Lawrence 2014; Parent & Deephouse 2007).

Stakeholder theory (Mitchell, Agle & Wood, 1997) does not account for the interprofessional relationships in the healthcare system. There are very distinct power gradients in the interactions between members of multidisciplinary teams (Atwal & Caldwell 2005; Kuhlmann & Burau 2018). Doctors are still the most powerful and dominant group within healthcare (Long et al. 2006; Johnson 2016). Social work is perceived to be the least powerful group (Long et al. 2006). The health system has been described as a "negotiated order" (Strauss et al. 1963). Decisions about the treatment and care of patients are only partly derived from rules (Nugus et al. 2010).

Patient care is a series of negotiations about professional roles. During these negotiations, competitive and collaborative power is displayed (Nugus et al. 2010). Competitive power refers to one professional group or a clinician from that group dominating others. Collaborative power involves mutual participation (Nugus et al. 2010, p.907). Psychiatrists have used competitive power to protect their professional boundaries from intrusion and invasion by other professional groups (Strauss et al. 1963; Johnson 2016).

Another weakness of Mitchell and colleagues' (1997) typology is that it does not distinguish between individual and collective power (Koberg et al. 1999). In mental health, both doctors and nurses are powerful. Doctors possess the most individual and collective power of the five professional groups (Boyce 2006). Doctors' claims are effectively negotiated by the strong arm of the AMA (Currie, Finn & Martin 2007). Nurses may not possess individual power but they do possess collective power. Nurses are the largest professional group in the healthcare sector. Over 50% of all staff in healthcare are nurses. Nurses also represent over 65% of all clinical staff in public mental health services (AIHW 2016). Nurses are a very large and powerful clinical group. Their strength through numbers is effectively displayed by the activities of the Nurses and Midwives Association. On the other hand, allied health

professional groups do not possess the same collective power as nurses. They do not have the same numbers or a strong union to represent them. Their power is negotiated through alliances with the more dominant and powerful professional groups (Nugus et al. 2010). In order to strengthen allied health stakeholder involvement in health workforce governance then the power relations between each professional group cannot be ignored (Kuhlmann & Burau 2018).

3.6.3 Summary

The professional groups in the mental health service are not equal in power. Nor do they possess the same ability to protect their boundaries from invasion by others (Fournier, 2000). Power and status in hospitals derive from a combination of profession, role and gender (Mackintosh & Sandall, 2010). Psychiatrists are the most powerful professional group in the mental health service (Johnson 2016; Long et al. 2006). Their role is more clearly defined than nursing and allied health roles. The activities they perform are exclusive and protected.

Psychiatrists have impermeable boundaries that are vigorously defended. These boundaries are less likely to be encroached on by the other professional groups. Thus, power enables psychiatrists to define the scope of their practice, spend more time performing discipline specific activities and delivering specialist care than nursing and allied health staff. Therefore, this points to a relationship between power and strength of professional identity. Yet this relationship has not been explored.

Role that is defined by discipline specific activities is also associated with professional identity. The next section reviews the literature on the blurring of roles in mental health services, the amount of time clinicians spend performing discipline specific and generic activities, and the impact this has had on professional groups.

3.7 Specific versus Generic Skills

Mental health reform in Australia and internationally has resulted in changes to both the models of care and professional roles in public mental health services (Bladon 2018; Lloyd, King & McKenna 2004). The most profound changes have been experienced by allied health and nursing staff working on community mental health teams. The introduction of case management as an effective model of care along with multi-graded positions has required allied health and nursing staff to assume new roles and responsibilities (Carpenter et al. 2003; Hannigan & Allen 2011; Sanborn 2014). Additionally, policy statements have called for patient and family centred care and collaboration, continuity of care and accessible and

evidence-based services (Jacka & Reavely 2014). Yet it is not certain that public mental health services are meeting these standards or the full range of consumer needs (Drake, Bond & Essock 2009; Kinderman 2014).

The shift to community based care and multi-graded positions created an expectation that the activities and roles being undertaken by allied health staff require predominantly generic rather than discipline specific activities (McKenna, Keeney & Bradley 2003). Generic activities are defined as "those interventions that any mental health professional that has been suitably trained to work in a community mental health team can carry out" (Cook 2003, p.19). Specialist interventions refer to activities that require discipline specific training and expertise (Nancarrow & Borthwick 2005). Clinicians are required to have a variety of skills common to all mental health workers. Yet there is a literature gap on who performs what activities in mental health services and what proportion of activities performed by nursing and allied health staff require discipline specific or generic skills.

Role blurring has been identified as a significant feature of working in community mental health services (Bonney & Stickley 2008; Brown, Crawford & Darongkamas 2001; Burns 2004; Paul 1996; Santangelo, Procter & Fassett 2018). A survey of occupational therapists employed as case managers on community mental health teams found they performed more generic activities than occupational therapists employed in inpatient rehabilitation units (Lloyd, King and Bassett 2002). The occupational therapists employed as case managers were concerned about two issues. First, they were concerned about the lack of opportunity to use their core skills to contribute to patient care. Second, they were concerned their unique discipline specific skills went unrecognised by other professional groups. The same concerns have been raised by nurses, psychologists and social workers (McNeil, Mitchell & Parker 2014).

Staff irrespective of their professional group perform the same activities in delivering care to consumers. Studies have found that this can result in conflict and job stress (Brown et al. 2011; Currie, Finn & Martin 2009; Galvin & McCarthy 1994; Lankshear 2003). Some have opposed the creation of generic mental health practitioners arguing that these roles diminish the unique role of professional groups (Nathan & Webber 2010). The claim is that with generic roles consumer needs are not met effectively and discipline specific skills are underutilised and undervalued.

However, few studies have mapped the specific areas of professional expertise, that is, specialist skills that members of different professional groups contribute to mental health services (Liberman et al. 2001; Weaver & Sorrells-Jones 1999). Hence, there is significant scope for further research into how well each professional group in mental health services recognise the unique skills of the other professional groups. Similarly, studies are needed into how many of the activities performed by members of each professional group in mental health services require discipline specific skills. Some work has been undertaken to identify the core competencies required of mental health staff (Coursey et al. 2000; Walker & Sonn 2010). Lloyd, King and McKenna (2004) explored the work activities of occupational therapists and social workers on mental health teams. They found that nine of the 10 activities performed most frequently by both professional groups were generic in nature. They also identified that social workers performed more generic work activities than occupational therapists. Nurses, psychiatrists and psychologists were not included in the study (Lloyd, King & McKenna 2004). They did not explore the relationship between amount of time engaged in specialist clinical activities and strength of professional identity. Nor did they explore the relationship between strength of professional identity and power.

The shift to community based mental health and generic interventions have been found to have detrimental effects on the professional identity and self-efficacy of clinicians, the delivery of care and interdisciplinary team collaboration (Fox 2013). Generic roles on community mental health teams have denied clinicians the opportunity to use their specialist skills and training (Fox 2013; Reeves & Mann 2004). This has resulted in increased insecurity, stress and frustration for clinicians. Furthermore, it has limited the range of expertise that can be shared within the team. The greatest source of tension or conflict between clinicians has arisen when the specialist skills within the domain of one professional group have been adopted by the other groups. This results in role blurring and the inability to differentiate one professional group from the others (Reeves & Mann 2004). The skills identified as most at risk of role blurring are the psychosocial and psychological interventions. The challenge is, as expressed by Weaver and Sorrells-Jones (1999, p.23), a dynamic and complex one: “Team members become a part of a team because they possess specific knowledge, skills, or expertise essential to meet the team’s operational objectives. As team members, each must understand and appreciate how individual member’s expertise contributes to the overall work of the team”.

Future research should focus on whether professional groups in community mental health services should be generalists or specialists and what would be more effective in delivering evidence-based and best-practice patient care. Further conversations and research about professional roles are critical to ensure the survival and development of professional groups and to meet the full range of needs of consumers of mental health services.

3.7.1 Interdisciplinary and Multidisciplinary Teams

There are two types of teams in mental health services, multidisciplinary and interdisciplinary teams (Harrison 2003, p.111). Multidisciplinary teams require all clinicians to take on generic roles. Each patient is assigned a case manager or care coordinator who is responsible for providing all the services necessary for that individual's care. Community mental health services follow a multidisciplinary model (Harrison 2003). Interdisciplinary teams combine separate disciplines onto one team. Each team member serves as a specialist and spends the majority of their time delivering discipline specific interventions. Each team member provides a discipline specific perspective to assessment and discipline specific skills to treatment. The interdisciplinary model is followed on inpatient mental health units and in general hospitals (Harrison 2003).

Community based mental health teams utilise a multidisciplinary team framework and require all professional groups to be generalists (Norman & Peck 1999). Some see benefits to this approach and argue holding on to traditional professional boundaries does not fit with the current models of care in mental health (Lloyd, King & Bassett 2002; Powell & Davies 2012). In order to survive, all professional groups need to achieve a balance between delivering generic activities and using discipline specific skills. An inability to do so may be detrimental to that professional group's ability to maintain a profile in community mental health. Additionally, generic roles allow team members to be open-minded and think more flexibly, adapt to changing demands and work more effectively (Corrigan 2002). Generic roles have been found to enhance access to care, continuity of care and foster interprofessional collaboration (Lloyd, King & Bassett 2002).

Proponents for generic roles have argued that professional boundaries are restrictive (Badcock, Pattison & Harris 2010; Williams 2019). Professionals are hemmed in and their practice rigidly defined and limited. Hierarchies and rigid boundaries create barriers to change and effective teamwork (Brown, Crawford & Darongkamas 2001). Generic models

produce a workforce that is flexible, adaptable and open-minded, qualities that are required by mental health services in the future.

Conversely, others have found generic models of care do not always deliver effective teamwork (Reeves & Mann 2004). Generic roles have fostered role blurring. Role blurring has resulted in unclear lines of accountability and responsibility, deskilling and constant negotiation and tension between professional groups from the pressure to undertake discipline-specific and generic activities. The result has been greater team confusion and discord. Research has found that effective teams are those with clear roles and responsibilities for each team member. This enhances team collaboration, reduces duplication, conflict and tension and results in better care for patients in the mental health service (Brown et al. 2001; Fox 2013; Sayce, Craig & Boardman 1991).

Generic models of care have been found to lead to a lack of common objectives (Brown et al. 2001; Williams 2019). Team members work in isolation with little knowledge of what skills other professional groups are able to contribute. Achieving team integration, harmony and efficiency, and positive patient outcomes is an ongoing challenge: "Team-based working, especially when it is of a non-hierarchical kind, can come into conflict with the notion that it is most efficient for everyone to do the work for which they are specifically trained" (Brown et al. 2001, p.426). When clinicians perform generic activities and work outside their area of expertise, they become less efficient. More time is wasted and fewer patients are seen. Waiting lists become longer and the pressure on clinicians and the service to respond to urgent referrals increases.

Employing professionals in generic roles prevents them from contributing their unique skills and detrimentally affects consumer care and service delivery (Fox 2013). Community mental health services need to develop strategic approaches to achieve better inclusion of discipline-specific contributions to patient care; acknowledge professional boundaries; and establish clear roles and responsibilities for each team member (Weller, Boyd & Cumin 2014).

3.7.2 The Dynamic Nature of Professional Boundaries

The boundaries between professional groups in healthcare have never been static (Nancarrow 2004; Touati, Rodríguez, Paquette & Denis 2018.). Professions grow, split, adapt and die (Abbott 2014). Professional roles have developed and evolved over the years in response to education, innovation, the rise of consumerism and regulatory, legislative, political and governmental changes. Professional boundaries have also changed in response to unmet

demands for particular services, and growing pressure exerted by the consumer movement. Boundaries between professional groups have also widened because of staffing shortages in medicine, nursing and allied health disciplines (Appel & Malcom 2002).

Workers with different training and skill sets such as allied health assistants, assistants in nursing and peer support workers have taken on tasks previously only performed by professionals (Browne et al. 2013; Lizarondo et al. 2010; Walker & Bryant 2013). Through formal qualifications provided by Technical and Further Education (TAFEs) and private education providers, they have acquired pseudo-professional legitimacy (Nancarrow & Borthwick 2005). Many of these changes have also been driven by the escalating cost of healthcare and the growing demands on the healthcare budget from an ageing population and those with chronic diseases (Phelps & Parente 2017). Allied health assistants and peer support workers present a cost-effective solution to the delivery of mental healthcare. By hiring these groups to perform generic activities, allied health clinicians can be freed to focus on discipline specific activities.

Due to staff shortages in remote and rural communities, nurses have mounted successful campaigns for expanded practice domains, including practicing with prescription rights as nurse practitioners and recognition as sexual assault nurse examiner's (SANES). These roles were previously performed by doctors only (Gall 2017). By taking over these tasks, nurses have increased their scope of practice, and as importantly established precedents that have been adopted by nurses in urban locations. Nurse practitioners are now located in the Emergency Departments of metropolitan hospitals to triage mental health presentations and they can prescribe antipsychotic medications (Wand et al. 2015). Nurse practitioners are also being appointed on community mental health teams and by primary health networks (Masso & Thompson 2017) These examples provide evidence of the plasticity of professional boundaries and how the disciplines are continually shaped by external demands and boundary shifts.

Heckman (1998, p.6), vice-president of the American Academy of Orthopaedic Surgeons, provides another example of the dynamic nature of boundaries. During the 1970s, an undersupply of orthopaedic surgeons led to them narrowing the scope of their practice. The orthopaedic surgeons chose to focus on the more complex and well-remunerated aspects of their role. Podiatrists and nurses stepped in to provide the services discarded by the orthopaedic surgeons. In subsequent years, an oversupply of orthopaedic surgeons created

competition for patients. Three strategies were available to resolve this dilemma: a reduction in the number of surgeons; to increase the demand for their services; and, to reclaim the territory previously discarded (Nancarrow & Borthwick 2005). This example illustrates the pressure that market forces can exert on health service provision and the subsequent changes on professional boundaries.

As discussed previously, when people with mental illness were confined to asylums, the medical fraternity did not have a prominent role in their treatment and care. This type of work was poorly regarded (Bostock 1968). Male attendants and nurses provided care for this population. Psychiatrists claimed this territory when medication became available to treat mental illness (Ban 2007; Turner 2007). This action reinforced the notion of psychiatry as a specialist field of medicine.

Both of these examples reinforce the notion of medical dominance in healthcare delivery. Powerful professions, such as doctors are able to (re)claim territory as they wish. The examples also illustrate the dynamic nature of professional boundaries and the willingness of lower status professional groups to provide the services discarded by higher status professional groups. In doing so, the lower status professional group is elevated by taking on the activities previously performed by a higher status, professional group (Cregard 2018; Nancarrow & Borthwick 2005).

3.7.3 Exclusionary and Usurpatory Strategies

The term “dirty work” has been used to describe the division of labour between professional groups where high status groups discard undesirable or poorly remunerated work to others (Hughes 1958; Mendonca & D’Cruz 2018). They retain the well-remunerated and desirable work. Larkin (1983) used the term occupational imperialism to describe the same process. Freidson (1970b) recognised that the provision of healthcare is subject to market pressures as well as social rules that shape the formal/informal status of occupations. Professional boundaries shift in response to both implicit and explicit controls and forces. They are also influenced by the power of other disciplines, laws, regulations, standards and policies in addition to the ability of the professional group to differentiate itself and its unique contributions from others in the delivery of healthcare.

Professional groups use competitive strategies to elevate their status by either poaching high status skills from other professional groups or taking over work discarded by high status groups. An example of this is the role of the accredited person in mental health services. The

role of the accredited person was to reduce medical dominance of the assessment and treatment of mental health conditions. The role was initially introduced in NSW in 2003 (NSW Health 2017). It enabled experienced mental health clinicians to make an initial decision about a person's need for involuntary admission under the NSW Mental Health Act 2007. A decision that only doctors could previously make. Therefore, becoming an accredited person elevated the status of those mental health clinicians appointed to the role because it was perceived as prestigious (Morriss 2015).

Nancarrow and Borthwick (2005) have stated that the blurring of boundaries between professional groups can best be explained by a combination of three different theories. The first theory is proletarianisation (McKinlay & Stoekle 1988). Proletarianism is concerned with the decline of medical power (Navarro 1988). The second is deprofessionalisation (Haug 1972). This describes the loss of unique skills, monopoly over knowledge and expectations of work autonomy experienced by professional groups. The third is post-professionalism (Kritzer 1999). Post-professionalism arises because of technological innovation and access to health information and knowledge. All of these different concepts and terms have been used to describe the power struggle between professional groups as they enforce exclusionary and counteract usurpatory strategies from others in the defence of and expansion of role boundaries. How well each professional group in mental health protects its professional boundaries depends on how much power that group has to enforce exclusionary strategies and counteract usurpatory strikes.

Professional boundaries are elastic (Nancarrow & Borthwick 2005; van Bochove, Tonkens, Verplanke & Roggeveen 2018). Professional groups use strategies to protect their own boundaries while at the same time invading others. Exclusionary strategies are used by professional groups to protect their own boundaries (Baldwin 2007). For example, psychiatrists use competitive entry into specialist areas of medical training, select membership to professional associations and credentialing to protect specialist skills and prescribing rights. Psychologists protect the use of the term, psychologist, through legislative and regulatory mechanisms. Nurses use training and credentialing to acquire specialist skills. Similarly, occupational therapists and social workers use competency frameworks as exclusionary strategies.

Usurpatory strategies are used by professional groups to extend their boundaries and to poach from or encroach on others (Baldwin 2007). Examples of usurpatory strategies include taking

over the discarded work of a high status professional group, or encroaching onto the skills of a similarly trained professional group (Borthwick 2000; Fitzgerald 2017). As noted previously, accredited persons have taken over the role of scheduling mentally unwell individuals, nurse practitioners have acquired prescribing rights, and all professional groups in the mental health service perform psychological therapies.

The blurring of professional boundaries can occur when professional groups identify new areas of work that have not been claimed by anyone else or by adopting skills usually delivered by another professional group through encroachment or consensual delegation (Witz 2013). Professional boundaries can move in four directions: diversification, specialisation, vertical substitution and horizontal substitution. Diversification and specialisation are strategies that are used to expand professional boundaries within a single discipline. Vertical and horizontal substitution are strategies used by disciplines to expand their professional boundaries across disciplines (Nancarrow & Borthwick 2005).

3.7.3.1 Diversification

Diversification is the process of identifying a new approach to practice that has not previously been within the domain of another professional group (Nancarrow & Borthwick 2005). Adopting this new method, skill-set or approach results in an expanded role for that professional group. Medicine has the strongest professional boundaries, control over its scope of practice and the most capacity to diversify (Baldwin 2007). It is important to understand diversification by mental health professionals. The professional groups with the most capacity to diversify and acquire new skills and approaches to practice will be in the strongest position to survive into the future.

3.7.3.2 Specialisation

Specialisation is viewed as the key to the division of labour but remains poorly defined. Specialisation is defined here as different levels of expertise within a professional group. Specialist titles are gained through specific education and training and recognised by membership to a subgroup of the profession (Nancarrow & Borthwick 2005). Specialisation confers exclusivity and privileges. For doctors, this means increased professional autonomy, elevated status, financial reward, power and professional security (Nugus et al. 2010; Tange 2016). The benefits of specialisation are not as obvious for nurses and allied health disciplines. They do not have the same formal structures as doctors for conferring specialist

titles. Psychologists have been prevented from using the term specialist despite extensive lobbying (Psychology Board of Australia, 2010).

3.7.3.3 Vertical Substitution

Vertical substitution occurs when clinicians from one professional group adopt the skills and activities of another professional group that is perceived to have greater expertise and prestige (Nancarrow & Borthwick 2005). Two examples of vertical substitution are nurse practitioners and allied health assistants. Nurse practitioners have been given prescribing rights and allied health assistants deliver components of an allied health practitioner role (Nancarrow & Borthwick 2005; Lim, North & Shaw 2017). The professions with most power tend to regulate the extent of vertical substitution. The impact of vertical substitution on professional status is not yet clear. Vertical substitution appears to elevate the professional status of the recipient professional group but not to the same level held by the original owners of the skills (Nancarrow & Borthwick 2005). For example, nurse practitioners who have acquired prescription rights do not have the same professional status as doctors.

3.7.3.4 Horizontal Substitution

Horizontal substitution occurs when clinicians from different professional groups with similar skills start performing activities normally perceived to be the domain of another professional group. An example of horizontal substitution is the use of psychosocial interventions and psychological therapies by social workers, nurses, occupational therapists and psychiatrists in mental health services. Horizontal substitution occurs more readily between professional groups of a similar status and power as they compete "for control over similar areas of expertise" (Nancarrow & Borthwick 2005, p.911). It is more likely to occur on multidisciplinary teams where clinician roles are similar and there is lack of role clarity and where tasks are unregulated and do not require use of restricted technology (Nancarrow & Borthwick 2005). Horizontal substitution has been found to occur more frequently between nursing and allied health disciplines than with medicine (Hugman 1991). This has also happened within the profession of nursing with the introduction of enrolled nurses and assistants in nursing. The two major risks of horizontal substitution are encroachment to professional boundaries and the opportunity to deliver more cost effective healthcare services by replacing expensive practitioners with less expensive alternatives.

Doctors have been the most successful profession in controlling the risk of horizontal substitution. They have used four strategies to maintain their professional dominance over

nursing and allied health (Willis 1983). The first strategy has been the subordination of the other healthcare professional groups. The second strategy has been the creation of impermeable professional boundaries. The third strategy has been the exclusive ownership of knowledge by limiting access to education and registration. The fourth strategy has been the incorporation of work performed by other professional groups into medical practice. These four strategies have enabled psychiatrists in mental health services to secure their professional boundaries from invasion and maintain dominance over the other professional groups. Aiding this has also been position in history, the established hospital hierarchy, gender and culture (Bell, Michalec & Arenson 2014).

3.8 Summary

The 4FM-PI presents the relationship between tribal, role, professional identity and stakeholder theories as well as specific versus generic skills (Figure 3.1). This synthesis of these theories is a new combination to create a multi-factorial and multidimensional model of professional identity. The four factors that contribute to strength of professional identity are: belonging (tribal theory), attachment (role theory), power (organisational hierarchy) and activities (discipline specific and generic). This model is a unique contribution of this thesis.

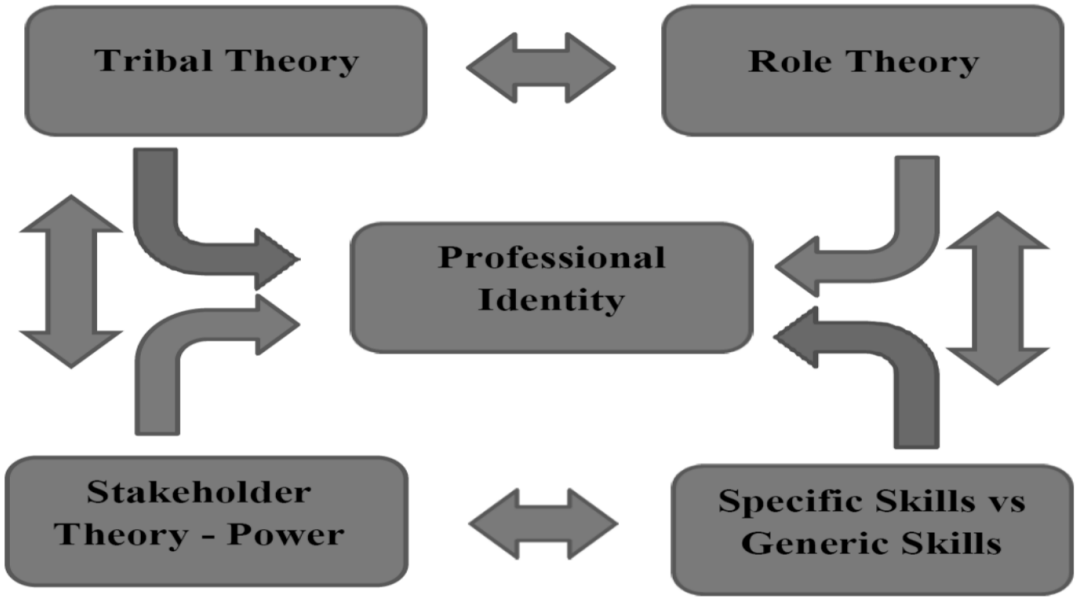


Figure 3. 3: The 4FM-PI

Professions in healthcare have been described as being members of different tribes. This sense of identification with a tribe influences the development of professional identity (Cova

& Cova, 2002; Mandy, Milton & Mandy 2004; Weller, Boyd & Cumin 2014). Being a member of a professional group is one of the roles assumed by mental health staff (Brookes et al. 2007). Individuals become a member of a professional group by learning and assimilating the behaviours, attitudes and values of that group through a process of professional socialisation (Mann et al. 2005; Best & Williams 2019).

The specific activities performed by members of each professional group determine membership of that group and influence the development of professional identity. The specific activities performed by each professional group also help to differentiate that specific group from the others (McKenna, Keeney & Bradley 2003; Becher 2018). The professional groups in the mental health service strive to maintain and expand their scope of practice in a changing and competitive healthcare landscape. Each group jostles for power (Coburn 2006; Cockerham 2017). The professional groups with the most power are best able to protect their boundaries from intrusions by other groups and therefore have more autonomy over their practice.

However, when work activities require predominantly generic skills rather than discipline specific skills the literature is silent on how this affects professional identity and power relationships between the professional groups in the public mental health services. Similarly, it is not known whether the full range of consumer needs are being met by public mental health services or what roles the professional groups have in meeting the healthcare needs of consumers now and in the future. This research addresses these issues. The next chapter describes the research design and methodology.

4. Methodology

4.1 Introduction

This fourth chapter outlines the research methodology and consists of ten parts. The first part is an outline of the chapter. The second part covers the research paradigm and overall design of the study. The methodology for this research was a mixed methods design using both a quantitative and qualitative approach to data collection (Guba & Lincoln 1994). In the third part, the research study rationale for a mixed methods approach is presented. This is followed by a discussion of the strengths and limitations of the mixed methods, quantitative and qualitative approaches. Part four discusses the survey tools, while part five covers the interview component of the study. Data analysis is covered in part six. The validity and verification of the research is presented in part seven. The limitations of the research are presented in part eight, part nine covers the research ethics and the last section provides a summary of the chapter.

4.2 Research Paradigms

Research is about curiosity and discovery (Scotland 2012). All research is propelled by the need to answer questions and build knowledge, and is underpinned by a research paradigm (Scotland 2012). Guba and Lincoln (1994, p.107) have described the research paradigm as a set of "basic beliefs or metaphysics" that represent a worldview. A research paradigm provides the infrastructure and theoretical justification for the methods chosen to answer the research question. The methods used to answer any particular research question, or set of questions, will vary according to the worldview of the researcher (Guba & Lincoln 1994). There are four components to a research paradigm. They are the ontology, epistemology, methodology and methods (Scotland 2012). The four components of a research paradigm have been briefly described and discussed in Appendix 5. Table 4.1 presents a summary of the four components of a research paradigm.

Table 4. 1: Research paradigms

What is out there to know?	How do we know what we know?	How do we acquire the knowledge?	What tools or procedures do we use?
ONTOLOGY	**EPISTEMOLOGY**	**METHODOLOGY**	**METHODS**
Objectivism	**Positivism**	**Deductive**	**Quantitative**
Existence of knowledge is independent of the researcher	The truth is out there to be discovered	From the general to the specific	Theory testing and interpreting phenomena
Constructivism	**Interpretivism**	**Inductive**	**Qualitative**
Reality is subjectively constructed.	The truth is developed through social interaction	From observations to theory	Theory generation and uncovering meaning.

Source: Adapted from Scotland (2012).

Quantitative research uses deductive strategies. It aims to analyse data statistically or numerically and to test hypotheses. Usually, the ontological orientation of quantitative research is objectivist and the epistemological orientation of quantitative research is positivist (Bryman & Bell 2007). In this study, a quantitative approach was used to measure strength of professional identity, power and the time spent on discipline specific or generic activity by each professional group. Statistical analyses of the relationships between these variables were conducted.

Qualitative research tends to focus on theory generation and, at such times, is primarily inductive. Normally, the ontological orientation of qualitative research is interpretivist and the epistemological orientation is constructivist (Bryman & Bell 2007). A qualitative approach enabled the researcher to explore activities, role, blurred boundaries and tension between the professional groups and what impact they believed this has on the provision of consumer care.

This study was a mixed methods design using both quantitative and qualitative research methods (Bryman & Bell 2007). The next section provides a discussion of the mixed methods research approach.

4.3 Mixed Methods Research

A mixed methods research study enables researchers to combine data so that words can add meaning to numbers (Denzin & Lincoln 2000). For this reason, a mixed methods design was used in this research. The use of both quantitative and qualitative methods was required to address the research questions and hypotheses, which aimed to assess and explore the topic, respectively (Curry, Nembhard & Bradley 2009). The quantitative method comprised four survey instruments and enabled the researcher to obtain measures of demographic data, professional identity, power and the time spent on discipline specific or generic activity by each professional group. The qualitative method used semi-structured interviews, to explore participants' perceptions about role and the impact of role blurring on professional identity, power and patient care.

Mixed methods designs can create synergy when "the results of one method … help develop or inform the other method" (Greene, Caracelli & Graham 1989, p.259). For example, in this research, survey data collected from the Mental Health Activities Checklist (MHAC) helped shape the interview questions. The results from the survey and interviews together served to give a richer and deeper understanding of how the professional groups in mental health services understand and negotiate role boundaries and what they think about that process (Berkwits & Inui 1998; Bryman & Bell 2007; Malterud 2001). Combining data from survey and interviews enables triangulation (Jick 1979; Flick 2004). Denzin (1978) identified four types of triangulation, data, investigator, theory and methodological triangulation. He Methodological triangulation is defined as "the combination of methodologies in the study of the same phenomenon" (Denzin 1978, p.291). This type of triangulation was used in this study.

Denzin (1978) noted that methodological triangulation could be within-method or between-method, also known as across- method. Within-method triangulation involves triangulating the data from multiple data collection methods, e.g. interviews, focus groups, or observations, in a qualitative case study or ethnography. Between-method triangulation involves triangulating data in a mixed methods study. Between-method triangulation was used in this study to triangulate data from quantitative and qualitative methods. Denzin (1978) recommended the use of between-method triangulation to overcome the weaknesses of each, with the goal being an in-depth understanding of the research questions or phenomena.

Methods triangulation allows for the combination of multiple methodological practices and perspectives in a single study and is best understood as a strategy that adds rigor, breadth complexity, richness, and depth to any inquiry (Flick, 2004). The intention of methods triangulation is to decrease the deficiencies and biases that come from any single method (Denzin 1978). In this research, interviews were used to build on outcomes of the quantitative data. The core strength of methods triangulation is its potential to expose unique differences or meaningful information that may have remained undiscovered with the use of only one approach (Denzin 1978).

Triangulation occurs when more than one method is used to explore the same phenomena in a single study (Hesse-Bieber 2010). It is closely related to the concept of "multiple operationism" that holds more than one method should be used to validate data (Campbell & Fiske 1959). Triangulating data can strengthen our "belief that the results are valid and not a methodological artefact" (Bouchard 1976, p.268). Triangulation can strengthen the research findings (Brymen & Bell 2007) and improve scientific rigour (Hussein 2015). Triangulation is said to provide a more holistic explanation of complex concepts such as professional identity, power and role blurring (Jones & Bugge 2006). Triangulation also allows for an abductive analysis of the data (Blaikie 2010). Abductive analysis enables the analysis to be located between inductive and deductive approaches.

A further strength of mixed methods research is the capacity for initiation (Brymen & Bell 2007). Initiation is the process whereby research findings raise questions or contradictions that cannot be answered. This outcome initiates further research. It is anticipated that the research findings from this study may identify areas that have not been addressed adequately or at all. This will inspire further investigations.

A mixed methods approach also encourages expansion. Expansion refers to extending the "breadth and range of the inquiry" (Greene, Caracelli, & Graham 1989, p.259). There is still a great deal that is not known about the impact of role blurring on professional identity and power relationships, the relationship between professional identity and work satisfaction, intention to leave, and employee stress, among other variables. It is anticipated that the current mixed methods research study will generate further questions that may be explored in the future.

The survey method has several strengths. This approach allows for data to be collected uniformly and for research studies to be easily replicated. It promotes reliability and validity

in data collection, as well as consistency and precision (Clark & Braun 2013). It allows for data to be presented numerically and statistically (Frankfort-Nachmias & Nachmias 2008). There can be more certainty regarding the conclusions from analysis of the data because researcher bias is eliminated or reduced. The quantitative method allows for predictions to be made because of the numerical basis of the analysis and to determine cause and effect relationships (Clark & Braun 2013). Analysis can be more precise and less time consuming (Curry, Nembhard & Bradley 2009). Other strengths of the survey method in this research included, being able to reach staff by email, achieving a potential maximum response rate, the use of validated tools and complete anonymity of parctipants. Here the survey method was required to measure strength of professional identity, power and time spent in discipline specific activities, as well as to answer all eight research sub-questions on activities, skills, professional identity and power.

There are also several limitations to the survey method. The first is the possibility of small sample sizes that are not representative of the target population. Small sample sizes can limit the generalisability of the findings. Second is the lack of resources for adequate data collection. Third, the survey method can lack the flexibility required to gather information with richness and depth on the participants' experiences and beliefs about role blurring, professional identity and power that was being sought. Fourth, there can be difficulty with data analysis and fifth there may be the lack of necessary resources to achieve the desired results (Frankfort-Nachmias & Nachmias 2008). The survey, or quantitative component, did not allow the researcher the capacity to answer the 'why' part of the research questions, for example, why is professional identity stronger in some professional groups (Matveev, 2002).

In order to address these weaknesses the researcher used a number of strategies. To maximise the sample size, the researcher used both on-line and hard copy survey packs. The on-line survey packs appealed to younger clinicians who were very comfortable with responding to surveys electronically while the hard copy packs encouraged more mature clinicians and those without access to computers to participate. The researcher also visited all inpatient units and community teams during day, evening and night shifts to promote the research and inform colleagues of the purpose of the study. Nursing unit managers were recruited to gather the completed survey packs and encourage clinicians to participate. Monthly and then fortnightly emails were sent out to all clinicians via the mental health service distribution list inviting clinicians to participate. The lack of resources for data collection was overcome by recruiting the nursing unit managers to assist in encouraging participation and gathering the

hard copy surveys for the researcher to collect. The lack of flexibility of the survey was redressed using a mixed methods design. The interviews allowed the researcher to explore the research questions with richness and depth. Any difficulties with data analysis were overcome by consulting and working closely with a statistics expert who provided any additional resources, software and programs that were required.

The interview method has a number of strengths. This approach enabled the researcher to elicit and explore participants' experiences with more depth than numerical or statistical data (Bowling 1997). The researcher was able to interact verbally and non-verbally with participants and explore meanings, feelings and experiences (Patton 2005). It allowed the researcher to penetrate defences and social desirability and tune in to subtlety (Matveev 2002). Additionally, the interview method enabled the researcher to create openness, avoid any pre-judgments and obtain responses with greater depth and detail from the participants particularly when talking about their experiences of tension with other disciplinary groups (Francis et. al 2010). The interview method allowed participants to talk about their experiences of tension subjectively and without censure or a need to rate or quantify them. The interview method enabled the researcher to analyse specific insights and turn individual experiences into usable data to answer the research questions (Patton 2005). Finally, the interview method also provided a more affordable, less time intensive and invasive approach to data collection than other qualitative methods such as ethnography (Matveev 2002).

The interview method also has weaknesses. One of the major weaknesses is that the researcher can influence the results (Patton 2005). The results can be influenced by the researchers' personal biases and idiosyncrasies (Matveev 2002). Different conclusions can be reached from the same data depending on how it is interpreted. This method requires experience in interviewing to elicit the required information from participants and there is a greater risk of inconsistency if the researcher uses different probing questions or techniques (Matveev 2002). Small sample size and self-selection by participants may affect generalisability (Patton 2005).

In order to address these weaknesses the researcher used a number of strategies. Use of a semi-structured interview ensured that each participant was asked the same questions and the process of collecting data was standardised. A larger sample size was used than is generally recommended to achieve data saturation (Francis et al. 2010). Data saturation is normally achieved with a minimum of 12 interviews (Guest, Bunce & Johnson 2006). The same

numbers of participants were drawn from each professional group as well as community and inpatient teams. The researcher conducted all the interviews to ensure consistency and reliability. The researcher used the same probing questions to encourage participants to be expansive. A professional transcription service ensured accuracy and fidelity in recording the interview data (Bryman & Bell 2007).

In summary, this study adopted a mixed methods design with surveys and interviews conducted. Triangulation was used to crosscheck the data from both research strategies and overcome the inherent weakness of each separate method (Bryman & Bell 2007). Interviews were used to build on outcomes of the quantitative data.

4.4 Survey Tools

Four survey instruments were utilised in the study: the Demographic Data Questionnaire (DDQ), Professional Identity Scale (PIS), Power Questionnaire (POWQ) and Mental Health Activities Checklist (MHAC). These tools are presented in Table 4.2. Each one is discussed briefly.

Table 4. 2: Survey tools

Tool	**Items/Focus**	**Scale**
Demographic Data Questionnaire	• Discipline • Education • Age • Gender • Community or Inpatient • Employment • Mental Health Experience	Free text/ Choices
Professional Identity Scale	9 items related to: • Attachment (4 questions) • Belonging (5 questions)	7 point Likert scale
Power Questionnaire	11 items related to types of power: • Coercive (4 questions) • Utilitarian (2 questions) • Normative (5 questions)	7 point Likert scale
Mental Health Activities Checklist	• Clinical Activities • Both Clinical And Non-Clinical Generic Activities • Non-Clinical Generic Activities • Internal Clinical Process Activities - Assessment And Formulation • Clinical Process Activities - Therapy • Clinical Process Activities - Continuity Of Care • Activities Related To External Providers	Yes/ No/ Choices

Tool	Items/Focus	Scale
	• Non-clinical Continuity and Support Activities.	

4.4.1 The Demographic Data Questionnaire

The Demographic Data Questionnaire was designed to record relevant data on each of the research participants (see Appendix 6). Participants were asked to report on their professional group, level of education, age, gender, employment in inpatient or community teams, number of years employed in mental health and years of mental health experience.

4.4.2 The Professional Identity Scale

The PIS utilised in this research was developed by Adams and colleagues (2006). It was initially developed to measure professional identity in nurses (Cowin et al. 2013). However, the PIS has also been used to measure strength of professional identity with some allied health professional groups (Adams et al. 2006). The PIS consists of nine items. The original version used a 5-point Likert scale. A 7-point Likert scale was used here to increase variance in the measure and improve reliability (Krosnick & Presser 2010). Most researchers recommend the use of a 5 or 7- point scale (Bearden, Netemeyer, & Mobley, 1993; Peter, 1979; Shaw & Wright, 1967). Reponses to questions ranged from 1 = strongly disagree to 7 = strongly agree. The PIS has adequate psychometric properties. Internal consistency was reported as 0.79 and factor loadings ranged from 0.46 to 0.73. A copy of the Professional Identity Scale is provided in Appendix 6. Internal consistency and factor loadings of the PIS in this study are provided in the Results section, see 5.8.2.

4.4.3 The Power Questionnaire

The POWQ was originally developed by Mitchell and colleagues' (1997) and adapted for use in the Global Leaders 2000 Questionnaire (Agle, Mitchell & Sonnenfeld 1999). The original questionnaire surveyed the three factors related to saliency: legitimacy, urgency and power. Factor analysis was used to group the questions into three factors. Testing of internal consistency using Cronbach's alpha was 0.93 for power, 0.88 for urgency and 0.91 for legitimacy (Agle, Mitchell & Sonnenfeld, 1999). The questionnaire was later adapted by Eljiz (2009) where she adopted a 7-point Likert scale to improve reliability. The researcher only used the power questions in this study, because out of the three stakeholder attributes, power has been found to have the most salience (Parent & Deephouse 2007).

Organisations tend to prioritise the most powerful stakeholders (Boesso & Kumar 2016). The Power Questionnaire consists of eleven items, on a 7-point Likert scale ranging from 1=Strongly Disagree to 7=Strongly Agree. Internal consistency for power was reported as 0.93 and factor loadings ranged from 0.89 to 0.92 in the original questionnaire. Internal consistency and factor loadings of the POWQ in this study are provided in the Results section see 5.10.1.

4.4.4 The Mental Health Activities Checklist

The MHAC was uniquely developed for this study. A copy of the MHAC is provided in Appendix 6. A review of the literature did not provide an activities list that was either suitable or could be adapted for use in this study (Webber & Nathan 2010). A pilot study generated a list of activities performed by nurses, occupational therapists, psychiatrists, psychologists and social workers in the provision of care to consumers of the SLHD mental health service. The MHAC activities were grouped into the following eight categories, Clinical Activities-Both Clinical and Non-Clinical, Generic Activities, Non-Clinical Generic Activities, Internal Clinical Process Activities - Assessment and Formulation, Clinical Process Activities – Therapy, Clinical Process Activities – Internal Continuity Of Care, Activities Related To External Providers and External Continuity and Support Activities. A detailed account of the procedure undertaken to develop the MHAC is presented in Appendices 7 to 12.

4.4.5 Participants

Participants were employees of the SLHD mental health service from the five professional groups: nursing, occupational therapy, psychiatry, psychology and social work. Stratified convenience sampling was used to ensure proportionate representation of the five professional groups. From the SLHD human resource employment database, there were 864 staff employed in the SLHD mental health service at the time of data collection (see Figure 4.1). There were 155 (18%) staff employed in administration, environmental, food and other support services that did not participate in the study. This staffing data was consistent with national data (AIHW 2012) which found at a national level, 50.6% of staff were nursing, 9.8% were salaried medical officers and 19.0% diagnostic and allied health. Urban services tended to have more medical staff than rural services (AIHW 2012, Buykx et al. 2010).

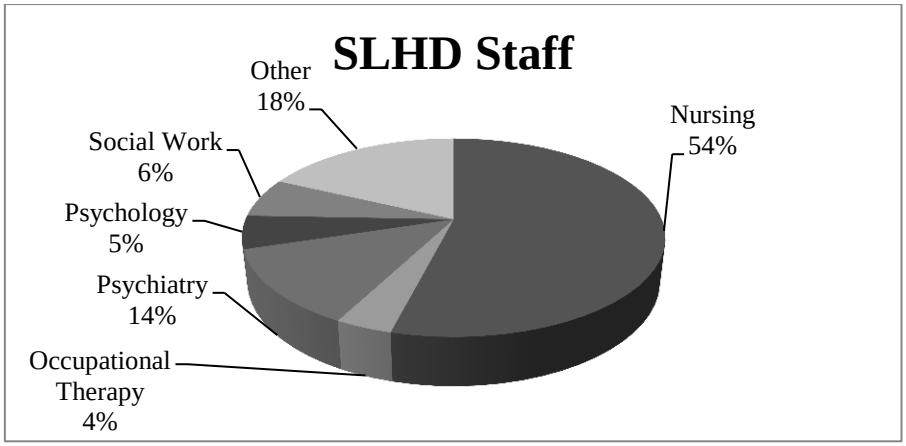


Figure 4. 1: SLHD mental health staff

4.4.6 Power and Effect Size

In order to determine number of participants needed to be representative of the population of the five professional groups in public health mental health services, the National Statistical Service's sample size calculator was used. A 95% confidence level for the estimate of the true population level, and a confidence interval of no greater than 2% were assumed. Given a population of staff within the district being studied (SLHD) of 709, a minimum sample of 102 participants was derived. This level of sampling would yield a standard error of no more than 0.01, or a relative standard error of no more than 1.0%. Thus, a sample of at least 102 participants would be representative not only of the five professional groups in public health mental health services in SLHD, but other comparable services in other health districts with similar models of care.

The degree to which this sample may afford statistical power was impacted by the unequal numbers in the five quasi-experimental groups. Non-parametric analytic approaches were needed because homogeneity of variance could not be assumed for most of the dependent variables. Assuming at least a large effect size is evident ($f>0.4$), and significance level is 0.05, the statistical power would be 80.1%. So while sufficient statistical power was likely to be afforded with this minimum sample, the actual power of analysis was calculated post hoc. The larger the sample size, the more generalisable the results (Marcoulides 1998). Larger sample sizes are also known to decrease estimation error and increase power (Van Voorhis & Morgan 2007; Suresh & Chandrashekara 2012). The researcher planned for a minimum of 200 completed survey questionnaires and 20 interviews. In total, 320 surveys were completed. This level of sampling yielded a standard error of 0.02, or a relative standard error of no more than 4.4% and statistical power of >80.1%. Ten interviews were conducted with

staff from inpatient services and ten interviews with staff from community services drawn from each of the five professional groups.

4.4.7 Survey Data Collection

A trial of the research instruments on five mental health clinicians drawn from each of the professional groups was conducted. This was to ensure that the instruments made sense, they were easily understood and the instructions were clear. Feedback from the participants was that the four research instruments were long but the instructions were easy to understand. These clinicians were excused from participating in the main study.

The researcher decided to maximise participation in the main study by collecting data using an on-line survey tool as well as distributing hard copy research packs. The rationale for this was that hard copy survey questionnaires were easier to complete by busy staff over a period of days. They would also capture staff who simply did not like on-line surveys as well as being a recommendation made by the clinicians involved in the trial of the research instruments.

The researcher and primary supervisor assembled 400 hard copy research packs. These consisted of the Letter of Consent and Participant Information; the four survey questionnaires; an Expression of Interest to participate in an interview; one small envelope addressed to the researcher for the Expression of Interest; and a larger envelope for return of the signed Letter of Consent and Participant Information, and completed questionnaires. Completed research questionnaires were returned to the researcher directly or sent back to the researcher anonymously through the SLHD internal mail.

In order to collect data on-line, the researcher enlisted the support of the Director of Nursing, Nurse Managers, Nursing Unit Managers, the Director of Mental Health Services, and Discipline Seniors for Occupational Therapy, Psychology and Social Work. These senior managers sent out an email from the researcher with the survey link encouraging staff from all five disciplines to participate in the research. The researcher then sent out progress reports via email every month for the first two months to all mental health service staff and fortnightly in the last month of data collection. This was an effective method of encouraging staff participation. There was friendly competition between the five professional groups as to which discipline would have the highest response rate. Data collection took place from September to mid-December 2016. There were 169 on-line surveys completed.

During this same period of data collection, the researcher visited every inpatient unit, such as PMBC, Jara, McKay, Manning, Manning East, Norton, Kirkbride, Broughton and Walker. The researcher spoke with staff at handover and case review meetings. The researcher told staff about the research and left research packs on each unit. The Nursing Unit Managers collected the completed research packs and placed them in a collection box or collection point for the researcher to retrieve. The researcher also visited the five community health centres, Redfern, Camperdown, Croydon, Canterbury, Marrickville and the Rivendell Adolescent Service and repeated this procedure. Staff who did not wish to leave their completed research packs with NUMs were given the option of returning them to the researcher by internal mail. Fifteen surveys were returned by SLHD internal mail. In order to capture the views of a cross-section of mental health staff, the researcher also visited the inpatient units on weekends and after hours. The night nurse managers assisted by collecting the completed research packs. Participation was voluntary.

In total, 320 survey questionnaires, 151 hard copy and 169 on-line, were completed by staff of the mental health service. This gave a 44% response rate.

4.5 Interviews

The second research component consisted of a semi-structured interview. The questions in the semi-structured interview were designed to allow participants to describe their experience of working in the mental health service alongside other professional groups (See Appendix 13).

4.5.1 Development of Interview Topics

The questions in the semi-structured interview were developed to explore topics including roles; the impact of horizontal substitution or role blurring; the permeability of professional boundaries between nursing and allied health; and, whether the mental health service was meeting consumer needs. These topics were the focus of the questions because a key point of the research was to understand the impact of multi-graded positions and role blurring on mental health service staff. The questions for the semi-structured interview were derived through an iterative process that included looking at literature, discussions with academic advisors and examining other survey tools that could be used or adapted for use in this study.

4.5.2 Interview Data Collection and Process

Data collection involved contacting 20 clinicians for hour-long interviews. The 20 clinicians selected for interview were drawn from the 320 participants who had completed the survey

questionnaires. Of these 82 had indicated they were willing to be contacted by the researcher for an interview by completing the Expression of Interest Form (see Appendix 14). The researcher selected 10 clinicians from inpatient services and 10 clinicians from community services. The first two clinicians who agreed to be interviewed from each professional group in inpatient services were selected. The same procedure was used for community services. Staff who reported directly to the researcher were excluded as were psychologists who worked in the same location as the researcher. This strategy was adopted to ensure participants could be open in expressing their thoughts and views. The inpatient clinician participants consisted of two from each profession - nurses, occupational therapists, psychiatrists, psychologists and social workers. The same method of selection was applied to the community participants for consistency, and same participant numbers.

Data saturation is defined as the point when enough data has been collected to answer the research questions (Bowen 2008). In qualitative research, it is the point when no new information, ideas, themes or meanings are emerging (Francis et al. 2010). Guest and colleagues (2006) recommend a minimum of 12 interviews to achieve data saturation. Yet others have found data saturation can be achieved with a sample of six interviews (Francis et al. 2010). In this study, the researcher wanted to capture the views of both inpatient and community mental health staff from nursing, occupational therapy, psychiatry, psychology and social work. It was important that all professional groups were represented in equal number. It was also important that community and inpatient staff were represented in equal number. The researcher therefore decided to initially interview only two staff from each professional group from community and inpatient teams. If data saturation was not reached, then more participants would be recruited. This was not necessary. Twenty interviews were completed.

The researcher contacted the 20 clinicians who were willing to participate in the interview to organise a date, time and venue for the interview. Interviews were organised so that there would be minimal disruption to consumer care. The interviews commenced with an introduction by the researcher and an overview of the research topic. Consent forms to participate in the interviews were signed before recording began. During the interviews, the researcher attempted to create a relaxed environment and reassured the participants that all material recorded would be confidential and not made available to team leaders or managers.

The semi-structured interviews ensured participants were asked the same questions in a systematic manner whilst also allowing the researcher some flexibility in questioning, clarifying vague responses and probing. Each participant was presented with the table of the top ten activities for each professional group from the preliminary survey analysis (see Appendix 15). This was followed by the predefined questions/ topics. Participants were encouraged to participate fully and not censor their thoughts. The interviews were conducted over one week with the researcher traveling to each clinician.

4.6 Data Analysis

Data from both the surveys and interviews was collated and analysed. Data was triangulated and interpreted to ensure that the research questions were addressed. Table 4.2 presents a summary of the research questions, the instruments used to answer each question and the statistical and thematic content analyses performed.

Table 4. 3: Data analysis summary table

Theme	**Question**	**Method** *S: Instrument* *I: Interview*	**Analysis**
Activities	1.1 What activities are performed by the five disciplines in the mental health service?	S: MHAC, Q32 I: Q1, 2, 3	Frequencies, Percentages Chi-Square and Fisher's Exact Test Thematic content analysis
	1.2 How much time is spent by each discipline on performing these activities?	S: Q30, 31	Frequencies, Percentages Type 3 Test (Regression)
Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?	S: MHAC I: Q2,3,4,5	Frequencies, Percentages Type 3 Test (Regression) Thematic content analysis
	2.2 Who does each discipline believe should perform these activities?	S: MHAC I: Q2,3,4,5	Frequencies, Percentages Thematic content analysis
Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	S: PIS	Mean PI Ranks Type 3 Test (Regression)
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	S: PIS, Q30	Mean PI, Percentages DSA Pearson Product Moment Correlation Coefficient
Power	4.1 What is the interaction between, professional identity, discipline specific activities and power?	S: PIS, Q30, POWQ I: Q1,4,5,	Mean PI, Mean POW, Percentages GA & DSA Type 3 Test (Regression) Pearson Product Moment Correlation Coefficient Paired T-Tests

Theme	Question	Method *S: Instrument* *I: Interview*	Analysis
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?	I: 6,7,8	Thematic content analysis

4.6.1 Survey Data Analysis

Data from the hard-copy survey questionnaires were manually entered into an excel spreadsheet. The researcher was assisted by a second person who crosschecked the data entry for accuracy. Data from the on-line survey questionnaires were converted into an excel spreadsheet. The two sources of data were then combined into one spreadsheet.

In consultation with the statistician, the researcher then completed a data dictionary (see Appendix 16) and data template (see Appendix 17) to enable the raw data to be entered into the Statistical Package for Social Sciences (SPSS) software (version 18). SPSS was used to analyse the data. Frequency analyses were used for the demographics data. These were presented in either numerical values or percentages. Graphs were completed. Details of the results are presented in the survey findings chapter, chapter 5, and the appendices.

The activities performed by each discipline were grouped into eight categories. These categories were themes, developed through an integrative process between the researcher and supervisor. These categorical variables were summarised using numbers and percentages. P-values were generated for the Chi-Square Tests or Type 3 Tests for general association between the five disciplines. Results that showed a statistical difference, ($p =< 0.05$) between the five disciplines were marked with an asterisk *. To answer whether the activities performed by each of the five disciplines required generic skills or specific skills these categorical variables were summarised using numbers and percentages and a p-value was calculated for the chi-square test for general association between the five disciplines.

The Kaiser-Meyer Olkin (KMO) and Bartlett's Test measure of sampling adequacy were used to examine the appropriateness of factor analysis for the Professional Identity Scale and Power Questionnaire. A Type 3 Test was performed to test whether the differences between disciplines on strength of professional identity and power were statistically significant. Baseline and follow-up numeric variables were summarised using the summary statistics, n, mean, standard deviation, minimum and maximum. Regression analyses were performed to

determine the difference between groups. A p-value for F-Test for the difference in the means of the groups was determined. Pearson Product-moment correlation coefficients were computed to test the hypotheses and assess the relationship between groups on the different variables, professional identity, power and discipline specific activity.

4.6.2 Interview Data Analysis

This section describes how the interviews were analysed.

4.6.2.1 Transcription of Interviews

Interviews were digitally recorded and transcribed by a professional transcribing service. Transcribing took place over December 2016 to February 2017. Transcribed interviews were entered into text documents for analysis. The researcher checked each transcribed interview against the recording to ensure accuracy. Minor errors were corrected, technical terms were checked for accuracy and any blanks filled in by the researcher. The blanks were usually related to technical terms or acronyms used by the participants. The transcription service staff were not familiar with these terms. The interview recordings were anonymised by using the automatic numbering system of the recorder. The last interview was of poor quality and despite the efforts of both researcher and transcription agency staff could not be transcribed. The interviewee was contacted and agreed to be re-interviewed. The electronic transcripts were not identified by name. They were stored on an encrypted USB and deleted once they had been transcribed.

4.6.2.2 Thematic Content Analysis

Thematic content analysis was used to analyse the qualitative data (Burns & Grove 2005). This process allows for a systematic analysis of written text by coding words or parts of sentences into themes relevant to the research question(s) (Burns & Grove 2005; Graneheim & Lundman 2004). Qualitative research can be placed on a continuum that reflects the degree of data transformation achieved by data analysis (Sandelowski & Barroso 2003). Content and thematic analyses, as well as descriptive phenomenology are suitable for researchers who require a low level of data interpretation (Sandelowski & Barroso 2003). These techniques analyse data into codes that are then grouped into themes. Grounded theory or hermeneutic phenomenology is a qualitative method better suited to high levels of data interpretation. This technique is most commonly used when the aim is to generate theories. This study did not warrant the use of this latter technique. The results of this study were analysed using thematic content analysis that comprised six steps (Burns & Grove 2005).

The first step was familiarisation. The researcher read the interview scripts several times to understand the content and to identify any patterns of meaning or preliminary themes (Clark & Braun 2013). This process involved detailed and repeated reading of the transcripts over a period of days. When reading each transcript the researcher took notes of key words, phrases and ideas that kept appearing in each of the interviews.

The second step involved organising the interview data into codes (Burns & Grove 2005). The transcribed text was read several times and organised into manageable and meaningful text segments with the use of a coding framework. The codes consisted of themes, ideas, thoughts, feelings, concepts, terms and key phrases (Guest, Bunce & Johnson 2006). The aim of the data extraction was to discover what mental health clinicians thought about the activities they performed and whether that affected their sense of professional identity. It was to discover what they thought about their roles and role blurring, the power relationships in the mental health service and whether they felt they were meeting the needs of consumers. After the transcripts were read repeatedly, analytic induction was used to identify codes emerging from the data (Thomas 2006). Overlapping or similar codes were reduced (Thomas 2006).

QSR N'Vivo™, a computerised data analysis package was used to perform the coding. The use of a computerised data analysis package can save time and efficiently organise the data into manageable, colour-coded text packages but human input was still needed to identify and check categorisation (Attride-Stirling 2001). A combination of QSR N'Vivo™ 10 and manual coding was used to ensure greater accuracy in coding because computer analysis does not always capture irony, sarcasm or nuanced meanings in recorded interviews (Strauss & Corbin 1990).

The third step was to define what each code meant and review this stage with the two supervisors. The objective of this task was to identify dominant themes, phrases and codes as well as any meanings that were shared by the interviewees (Guest, Bunce & Johnson 2006).

The fourth step involved identifying and abstracting themes from the coded text segments (Burns & Grove 2005). The codes were grouped into six themes, that is: tribal theory; role theory; professional identity theory; power; discipline specific; and, consumer needs.

The fifth step involved organising the six themes into four global or superordinate themes that related to the research questions (Burns & Grove 2005). This was done by colour coding the themes into global themes, that is: Activities; Role; Leadership; and, Consumer Needs.

During the coding process, similar codes in the data were compared and reviewed in relation to the research questions. The initial coding of themes was assisted by using colour coding for text segments and creating tables. These techniques helped the researcher to organise the information emerging from the data into distinct codes. The text segments were read repeatedly across all transcripts to search for similarities and differences (Thomas 2006). Codes were compared to identify inconsistencies, patterns and frequencies. This constant repetition, comparison and review of the data ensured that codes were appropriately assigned and relationships between codes identified.

Themes were discovered by grouping the codes and mapping them onto the theories. The theories were mapped onto the research questions. After the themes were developed, the transcripts were again searched for responses connected to the themes. Development of the themes was an iterative process that involved identifying words, ideas or phrases, grouping the codes, comparing them and reducing them into global themes (Thomas 2006).

The final step involved describing, exploring and interpreting the themes to answer the research questions. The codes were analysed and categorised in two ways, deductively and inductively, with the results combined to produce a findings matrix (Table 6.2). Analysis that sits between both approaches, inductive and deductive is known as abductive analysis (Blaikie 2010). Deductively, the codes were grouped into six descriptive themes that mapped onto the four theories: tribe theory; role theory; professional identity theory; power; and two categories, discipline specific skills and consumer needs. Inductively, the codes were organised into analytical themes. Four analytical themes were extracted. The first theme was *Activities,* which explored the similarities and differences between each group. The second theme was *Role,* which covered role conflict and the impact of horizontal substitution on the disciplinary groups. The third theme was *Leadership,* which explored the influence of power and authority on relationships between the disciplinary groups. The fourth theme was *Consumer Needs,* which examined what changes were required to meet the full range of consumer needs of the public mental health services.

4.7 Research Rigour

A variety of terms has been used in the literature to emphasise the importance of research that is credible, reliable and valid. Some of these terms are credibility, transferability, generalisability and dependability (Creswell & Miller 2000). On a practical level, this requires that researchers implement a number of procedures to ensure the credibility and validity of the research findings (Salvador 2016; Vaismoradi, Turunen & Bondas 2013). In this study, as outlined above, this included using survey instruments with sound psychometric properties for example, reliability, validity and consistency; a large sample size; and, power and effect size calculations. Additionally, the researcher used further strategies that helped identify her mental models and cognitive biases, and how they influenced her interpretation of the data. The strategies used included reflection, reflexivity, supervision and triangulation. Additionally, the researcher used transparency in data collection and analysis, credibility with colleagues and peer review.

4.7.1 Reflection

Reflection involves being able to identify and interpret the meaning of self on others, and has been explained as follows: "Self-Reflective Awareness is a meta-cognitive ability, meaning that it involves thinking about and reflecting on one's own mental processes" (Henriques, 2016, p.1). The researcher was cognisant of the fact that she was interviewing colleagues about their views on the tensions that existed within the mental health service between professional groups. The researcher was aware that she held a senior role in the MHS and was a member of one of the professional groups being interviewed, i.e. psychology. As such, she was mindful of not letting her own thoughts and perceptions influence the responses of participants.

The researcher found it uncomfortable hearing negative views expressed about psychologists by participants from other disciplines. Therefore, the researcher made sure she did not communicate her distress by way of verbal or non-verbal communication. The researcher believed that had she conveyed her distress or private views, participants would have censored their responses. Similarly, the researcher was careful not to communicate any disagreement with comments that were dissimilar to her own views. Conversely, the researcher was careful not to communicate any agreement with comments similar to her own views.

4.7.2 Reflexivity

Good research requires both the ability to reflect as well as to be reflexive (Sandelowski & Barroso 2002). Reflexivity "entails the ability and willingness of researchers to acknowledge and take account of the many ways they themselves influence research findings and thus what comes to be accepted as knowledge. Reflexivity implies the ability to reflect: inward toward oneself as an inquirer; outward to the cultural, historical, linguistic, political, and other forces that shape everything about inquiry; and, in between researcher and participant to the social interaction they share" (Sandelowski & Barroso 2002, p. 222). Reflexivity is, primarily, an introspective process.

The researcher was able to identify her own experiences and beliefs, and their influence on all aspects of the research process using a number of strategies (Orcher 2016). The strategies included on-going reflection and SRA, diarising her thoughts using a tape recorder after each interview and discussion of these ideas during supervision. Use of these strategies throughout the research process ensured that supervisors could challenge and question the researcher's assumptions, knowledge and approach at all stages.

4.7.3 Supervision

Being a psychologist, the researcher was familiar with the notion of supervision from the perspective of having been a supervisor and having been supervised. Therefore, the researcher positively embraced the supervisory relationship from the beginning. The role of the supervisors throughout the research process was, to support, guide, and review and challenge the researcher's ideas, views and assumptions (Bowling 1997; Bryman 2015). Engaging in this process ensured that each aspect of the research underwent a process of external review.

4.7.4 Triangulation

Triangulation is used to examine a subject of enquiry from different perspectives (Hussein 2015). In this study, the researcher used a number of methods of triangulation. First, the methodological method was used consisting of questionnaires and interviews. Second, environmental triangulation was used (inpatient, community, units, teams, day shifts, night shifts and weekend). The triangulated data provided a deeper and more nuanced understanding of professional identity, role, power and activities in the mental health service.

4.7.5 Transparency and Accountability in Data Collection

A detailed and transparent account of the methods used to collect and analyse the data in this study have been provided in this chapter. Every step of the process in constructing any of the research tools, such as the MHAC and interviews, has been articulated. When analysing the data, the researcher was careful to look for any evidence that confirmed or disconfirmed the emergent perspectives, concepts and themes. The results section presented the findings in a transparent manner.

4.7.6 Rich, Thick Description

Qualitative researchers advise that one methodological strategy to ensure the trustworthiness of findings is rich, thick descriptions of the parctipants' responses to interview questions (Lincoln & Guba 1985; Rolfe 2006). The researcher has provided significant detail to prove credibility and life to participants' views.

4.7.7 Credibility with Colleagues

The researcher has been employed in the SLHD mental health service for 10 years in a senior role. Her role consists of administrative and management tasks, leadership as well as clinical work. The clinical aspects of the researcher's role in developing the area of risk assessments with high-risk civilian patients as well as forensic patients has given her credibility with the clinicians across the mental health service. She has a reputation as a caring, discreet and experienced clinician and a reliable colleague. Participants viewed her as internal to the organisation and someone they could trust. This credibility with colleagues contributed to participants being able to be frank and open with their private thoughts and perspectives in the interviews.

4.7.8 Peer Review

Formal annual PhD supervisory meetings ensured that the research was constantly reviewed by experts in the research process. Presentations at local (5), state (4), national (6) and international conferences (4) exposed the research methodology and emerging findings to subject matter experts as well as peer review. Invited talks (5), presentations at symposia (2) and academic publications (1) ensured the research was presented to a wider audience. A seeding grant award and best abstract award followed a competitive process and review by external academics (see Appendices 18 and 19).

4.8 Limitations of the Research

All research methods provide challenges in terms of addressing limitations as well as managing and eliminating bias (Turner, Cardinal & Burton 2017).

4.8.1 Generalisability

A limitation of this research is that participants were from one mental health service in a metropolitan local health district in NSW. As such, they may not represent the views of clinicians in remote and rural health services. However, in order to ensure that the results of this study could be generalised to other mental health services, the researcher ensured that the profile of staff, consumers and models of care adopted in the SLHD matched those of other mental health services.

4.8.2 Limitations of the MHAC

The MHAC captured the majority of activities performed by the professional groups in the mental health service but it did not cover everything. Some activities that clinicians performed were left out. To address this limitation, Question 32 in the survey pack provided clinicians an opportunity to add any other activities they performed that were not included in the MHAC. These activities were identified and presented in the research findings in chapters 5 and 6.

4.8.3 Researcher Bias

Researchers are required to eliminate, reduce or control for bias in their studies (Siddiqi 2011). No study is completely free of bias. Bias is defined as "any trend or deviation from the truth in data collection, data analysis, interpretation or publication which can cause false conclusions" (Simundic 2013, p.12). While not being able to eliminate all bias, it is important for researchers to control for bias and acknowledge any limitations in the study (Sica 2006). The researcher was able to identify several types of bias that may have impacted this study and used the following strategies and procedures to control for bias, and verify and validate the research findings.

The researcher was conscious of being an employee of the mental health service. During the study she was aware of her own observations, thoughts and concerns about role blurring and its impact on professional identity and power relationships between the professional groups. The researcher did not want her own position to influence participants' responses. Researcher bias was minimised through regular supervision and the use of both reflective and reflexive practice. The researcher was advised to keep a journal of her thoughts and impressions

throughout the research process. These were regularly discussed with and challenged by her supervisors, and also academic colleagues at professional and academic conference presentations.

Bias was also minimised in data collection by having semi-structured interviews and a set of probing questions. Staff who reported directly to the researcher were excluded from participating in the interviews. This was to ensure participants were free to voice their views without censure or fear of any perceived retribution. Similarly, psychologists working in the same location as the researcher, even though they did not directly report to her were also excluded from the interviews.

4.8.4 Participant Bias

The researcher identified two types of participant bias. These are selection bias and social desirability bias (Sica 2006). Selection bias occurs when participants in a study are not representative of the population (Petrie & Sabin 2010). Selection bias produces results that may be both reliable and valid but cannot be generalised (Petrie & Sabin 2010). High response rates from the target population can help minimise selection bias. Hence the researcher attempted to counter this issue by taking significant steps to encouraging participation. This resulted in a 44% response rate in this study, which is deemed high (Bowling 1997; Turner, Cardinal & Burton 2017). Social desirability bias occurs when participants "modify their responses to be socially acceptable or to save face or reputation with the interviewer" (Cooper & Schindler 2003, p. 252). The researcher ensured social desirability bias was reduced by encouraging interviewees to be open with their responses and by excluding any direct reports. Additionally, through the reflection and reflexivity strategies outlined above the researcher strove to understand and minimise any negative impact on the study.

In summary, not all bias can be eliminated from research. What is important is that the researcher maintains fidelity to the research methodology, and that the research is conducted with transparency and integrity. Where biases and limitations were identified, their impact on results were minimised and, where necessary, explained.

4.9 Ethical Considerations

This research was granted approval on 23 July 2015 by the Sydney Local Health District Human Research Ethics Committee - Concord Repatriation General Hospital (EC00118) Reference Number CH62/6/2015-123- LVrklevski; LNR/15/CRGH/144 and endorsed by The

University of Tasmania HREC, H0015159. The study sites included in this approval were Concord Repatriation General Hospital – The Concord Centre for Mental Health (Sydney LHD) LNRSSA/15/CRGH/145, Royal Prince Alfred Hospital – Professor Marie Bashir Centre (PMBC) as well as Redfern, Camperdown, Marrickville, Croydon and Canterbury Community Mental Health Centres LNRSSA/15.RPAH/374 (see Appendices 20 to 24).

The basic principles of research ethics were adhered to during each phase of the study (Bryman & Bell 2007). No harm or discomfort was caused to any participants. The privacy and confidentiality of all research participants was stringently protected and maintained. Participation in the research was voluntary and free of any coercion or deception. The purpose of the study was clearly explained to participants to ensure informed consent was obtained (Bryman & Bell 2007). Each participant was provided with a copy of the Participant Information and Consent Forms (see Appendix 25) explaining the purpose of the research. There were no financial incentives or reimbursement offered to participants for their involvement in the research.

Participants were not identified at any stage of the research. The thesis and any articles published in academic journals will include deidentifed information. To ensure that participants were able to express their views freely and without censure and to minimise bias, the researcher excluded staff that directly reported to her. All raw data was securely stored on an encrypted USB, the researcher's computer and a locked filing cabinet. No other individual had access to the raw data. The data included all results of the research questionnaires and surveys, electronic recordings of interviews, interview transcripts, and names of interview participants. The researcher will store the data securely for a period of seven years either from the date the thesis is submitted or published. After this period, the data will be destroyed.

4.10 Summary

This chapter covered the research methodology. It commenced with an outline of the chapter and then covered the research paradigm and overall design of the study followed by the rationale for a mixed methods approach. The strengths and limitations of the mixed methods approach were discussed. This was followed by a discussion of the data collection methods - surveys and interviews. Data analysis was covered, as were the strategies used to ensure the validity, credibility and verification of the research. The limitations of the research and

strategies to minimise these were presented, and the last part of the chapter covered research ethics. The next chapter presents the analysis of the survey data.

5. An Investigation of the Relationship between: Activities, Roles, Professional Identity and Power.

5.1 Introduction

This chapter describes the survey research findings. The chapter consists of seven parts. The first part sets out the contents of the chapter. The second part is a summary of the demographics data. The third part, activities, addresses sub-questions 1.1 and 1.2. The fourth part, skills, addresses sub-questions 2.1 and 2.2. The fifth part, professional identity, addresses sub-questions 3.1 and 3.2. The sixth part, power, addresses sub-questions 4.1. The seventh part addresses the three hypotheses. The themes, associated questions and specific methods for each of the research sub-questions are listed in Table 5.1.

Table 5. 1: Research sub-questions

Themes	**Question**	**Method**	
		Survey	**Interview**
1.Activities	1.1 What activities are performed by the five disciplines in the mental health service?	MHAC, Q32	Q1,2,3
	1.2 How much time is spent by each discipline on performing these activities?	Q30,31	
2.Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?	MHAC	Q2,3,4,5
	2.2 Who does each discipline believe should perform these activities?	MHAC	Q2,3,4,5
3.Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	PIS	
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	PIS, Q30	
4. Power	4.1 What is the interaction between professional identity, discipline specific activities and power?	PIS, Q30, POWQ	Q1,4,5
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?		Q7, 8

Three hypotheses were tested in this study. These hypotheses are addressed in section 5.12 to 5.15 of this chapter. The hypotheses and methods of statistical analysis are explained in Table 5.2.

Table 5. 2: Hypotheses

Hypothesis	Method
1. Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.	Correlation between PIS and Q30 scores.
2. Strength of professional identity will have a positive relationship with power.	Correlation between PIS and POWQ scores.
3. There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.	Paired T-test between PIS Inpatient and PIS Community for overall sample and between groups.

5.2 Demographics Data

Demographics data was collected on the five largest clinical groups in the SLHD mental health service; nursing, occupational therapy, psychiatry, psychology and social work.

5.2.1 Sample

Descriptive statistics were used to present the demographics data. Information about staffing of the SLHD mental health service was obtained from the Department of Human Resources (SLHD). According to the Human Resource internal employment database, there were 864 staff employed in the SLHD mental health service during the data collection period; 54% nursing, 12.5% psychiatry (staff specialists and registrars in psychiatry), 15.5% allied health (6.4% social work, 5.4% psychology, 3.7% occupational therapy). This amounted to 710 staff from the five professional groups of interest in this study.

The remainder of staff were employed in administration, environmental, food and other support services. This amounted to 154 staff. These staffing figures were consistent with national data (AIHW 2018). At a national level, mental health services are comprised of 51% nurses, 10.4% salaried medical officers and 19.0% diagnostic and allied health staff. Urban services tend to have more medical staff than rural services (AIHW 2018).

Table 5.3 presents data on staffing of the SLHD mental health service and the percentage of staff from each discipline that participated in this study.

Table 5. 3: Sample response rates across disciplines

Sample	Disciplines N (%)				
	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**
Staff in MHS (N=864; 100%)	466 (54.0)	32 (3.7)	108 (12.5)	47 (5.4)	55 (6.4)
Respondents (N=320; 44.5%)	154 (48.7)	25 (7.9)	61 (19.3)	44 (13.9)	32 (10.1)
Total %	33.0	78.1	56.5	93.6	58.0

The number of staff in the SLHD-MHS equalled 864. Of those, 710 were from the five disciplines included in this study. Four of the on-line research questionnaires were only partially completed and not all information could be used. Frequency analyses were used for the demographics data. These are presented in either numerical values and/or percentages.

The highest response rate was from psychologists, with 93.6% of the psychology workforce participating in the research. The lowest response rate was from nurses with 33.0% of the nursing workforce participating in the research. The demographics data was analysed for response rates from each discipline, the education level of participants, age distribution, gender, work location (inpatient units or community teams), years of employment and years of experience in mental health. About 57% of respondents had post-graduate qualifications in addition to a Bachelor's degree. Over 70% of respondents were under the age of 50 years. Sixty-five% of respondents were female and 35% were male. About 71% of respondents were located on inpatient units and 29% on community teams. Seventy% of respondents had been employed less than 10 years. About 55% of respondents had less than 10 years specific mental health experience and 45% of respondents had over 10 years of mental health experience. As per Table 5.3 the number of respondents overall was quite large and broken down into the five disciplines. Four out of the five groups had <70 respondents. Breaking down the data into demographics such as age, qualification and size of workplace would have made the groups even smaller and thus reduce the effectiveness and generalisability of the quantitative analyses. It was simply not feasible to do this and doing so would not have yielded worthwhile results.The detailed results of the analyses are presented in Appendix 26.

5.3 Activities – Question 1

This chapter presents the results of research sub-questions 1.1 and 1.2. Questions 1.1 and 1.2 are presented in Table 5.4 below.

Table 5. 4: Activities

Themes	Question	Method	
		Instrument	**Interview**
1.Activities	1.1 What activities are performed by the five disciplines in the mental health service?	MHAC, Q32	Q1,2,3
	1.2 How much time is spent by each discipline on performing these activities?	Q30,31	

5.4.1 What Activities are Performed by the Five Disciplines in the Mental Health Service?

As noted previously, a pilot study was conducted to develop the MHAC. This study generated a list of activities performed by nurses, occupational therapists, psychiatrists, psychologists and social workers in the provision of care to consumers of the SLHD mental health service. In terms of the activities performed by each discipline, Tables 5.5-5.12 indicate that out of the 95 mental health activities generated in Pilot Study 2, these activities could be grouped into eight categories.

The eight categories are; clinical activities, both clinical and non-clinical generic activities, non-clinical generic activities, clinical process activities of assessment and formulation, therapy and continuity of care, activities related to external providers and continuity and support activities.

When completing the MHAC in the survey questionaries, research participants were asked to indicate their disciplinary group and the activities they performed by placing a tick in the yes or no boxes for each activity. These categorical variables (discipline and activity) were summarised using numbers and percentages. A p-value for the chi-square test for general association between the five disciplines was performed. A Fisher's exact test rather than a Chi-square test was performed with small numbers (<10) in any cell of the data table. Results that showed a statistical difference, (p= <.05) between the five disciplines are marked with an asterisk (*) and highlighted in grey. Table 5.5 presents the clinical activities performed by staff of the mental health service.

Table 5. 5: Self-reported activities performed by each discipline (Activities I perform) Clinical activities

Activity	Disciplines				
	%Nursing (n=154)	%Occupational Therapy (n=25)	%Psychiatry (n=61)	%Psychology (n=44)	%Social Work (n=32)
Patient Medical Assessment Review	50	18	**98***	24	34*
Review of Medical/ Blood Results	48	9	**98***	15	10
Pathology Requests	37	9	**91***	12	14
Medication Review	43	14	**98***	12	21
ccCHIP Referral Form Completion	48	24	**58***	22	31
Psychiatry Review in Home with Registrar	29	27	**58***	27	34
Medication Prescribing	13	0	**93***	7	0
Legal Activity (MHA) Schedules	31	14	**87***	15	24
One-to-One Nursing Care	**88***	0	2	7	10
Administer PRN Medication	**88***	9	16	12	17
Nurses Meeting	**93***	5	7	15	3
Clozapine Clinic	**40***	14	31	10	14
Nursing Ward Rounds	**79***	5	7	10	0
Supervise Consumer Bathing	**65***	29	0	7	0
Assist Consumer Washing Clothes	**69***	**67**	0	7	4
Give Medication Oral and IMI	**90***	14	15	12	3
Supervise Meal Times	**75***	29	0	17	21
Living Skills Assessment	45	**100***	5	20	31

The clinical activities are dominated by psychiatry and nursing and focus on the physical and medical care of the consumers. Occupational Therapy, psychology and social work while involved in some aspects of the physical care of consumers assume a support role. Activities highlighted in grey are very clearly perceived by that discipline to be discipline specific and tend to have impermeable boundaries. Psychiatrists perceived the following clinical activities

as psychiatry specific: patient medical assessment review (98%), review of medical/blood results (98%), pathology requests (91%), medication review (98%), ccCHIP referrals (58%), psychiatry review in home with registrar (58%), medication prescribing (93%), and legal activity (MHA) schedules (87%). Similarly, nurses perceived the following activities as nursing specific: one-to-one nursing care (88%), administering PRN medication (88%), nurses meeting (93%), clozapine clinic (40%), nursing ward rounds (79%), supervise consumer bathing (65%), assist consumer washing clothes (69%), giving medication oral and IMI (90%) and supervising meal times (75%). These physical care activities are consistent with a medical model in the treatment of mental illness. Clinical and non-clinical generic activities are presented in Table 5.6.

Table 5. 6: Self-reported activities performed by each discipline - Both clinical and non-clinical generic activities

Activity	**Disciplines**				
	%Nursing (n=154)	**%Occupational Therapy (n=25)**	**%Psychiatry (n=61)**	**%Psychology (n=44)**	**%Social Work (n=32)**
Mandatory Training	99	100	96	100	90
Professional Development	97	100	98	100	97
Journal Club	33	39	**91***	44	19
Teaching	73	70	**93***	55	50
Research	51	65	68	58	52
Learning & Development	95	100	98	98	90
Outing with Consumers	76	**83***	11	39	**82***
Review of Patient Files	88	91	100	93	90
Powerchart Entries	97	96	98	93	86
Correspondence with Senior Clinician and Others	91	96	98	95	89
Support Distressed Consumer	96	100	95	90	93
G.P. Collaborative Projects Meeting	49	52	43	37	61

In terms of both clinical and non-clinical generic activities all disciplines engaged in mandatory training, professional development, journal club, teaching, research, learning & development, outings with consumers, reviews of patient files, Powerchart entries, correspondence with senior clinicians and others, supporting distressed consumers and G.P. collaborative projects. Of note was that psychiatrists reported engaging in journal club (91%) and teaching (93%) most often and outings with consumers least often compared with the other four disciplines. Table 5.7 presents the non-clinical generic activities.

Table 5. 7: Self-reported activities performed by each discipline - Non-clinical generic activities

Activity	**Disciplines**				
	%Nursing (n=154)	**%Occupational Therapy (n=25)**	**%Psychiatry (n=61)**	**%Psychology (n=44)**	**%Social Work (n=32)**
Management	55	30	**59***	28	29
Staff Performance Management	**52***	26	39	15	36
Administrative Tasks	80	91	86	93	89
Emails and Correspondence	91	100	96	100	100
CERNER	78	68	82	73	79
Orientation New Staff	**86***	57	66	68	71
Provide Operational Supervision	**61***	43	45	43	39
Receive Operational Supervision	69	78*	51	65	**79***
Follow-up Consumer	78	83	88	85	90
Meeting-Operational Matters	60	65	61	60	82

Non-clinical generic activities (Table 5.7) consisted of; management, staff performance management, administrative tasks, emails and correspondence, CERNER, orientation of new staff, provision of operational supervision, receipt of operational supervision, follow-up of consumers and operational meetings. While all disciplines participated in these activities, of interest was that nurses (55%) and psychiatrists (59%) were twice as likely to be managing staff as the allied health disciplines. Nurses (52%) were most likely to be in charge of teams and therefore conducting operational supervision of other staff and managing underperforming staff. Conversely, social workers (79%) and occupational therapists (78%)

were the occupational groups most likely to receive operational supervision. Table 5.8 presents the clinical process activities involving assessment and formulation.

Table 5. 8: Self-reported activities performed by each discipline - Clinical process-assessment and formulation

Activity	**Disciplines**				
	%Nursing (n=154)	**%Occupational Therapy (n=25)**	**%Psychiatry (n=61)**	**%Psychology (n=44)**	**%Social Work (n=32)**
Mental Health Assessment	89	91	**100***	92	79
Referrals	72	91	**95***	87	93
Complete MHOAT Modules, K10, HoNOS Etc.	**88***	59	51	56	54
Report Writing	91	96	96	95	100
Mental State Exam (MSE)	88	83	**98***	85	54
Risk Assessment	93	87	100	87	86
Home Visits	49	**100***	55	49	**90***

Internal - Clinical process - assessment and formulation activities consisted of mental health assessment, referrals, completion of MHOAT modules, report writing, mental state examinations (MSE), risk assessments and home visits. All disciplines perceived themselves engaged in these activities. Of note was that nurses reported that they were mostly responsible for completion of the MHOAT modules (88%) compared with occupational therapists (59%), psychiatrists (51%), psychologists (59%) and social workers (54%). Home visits were most often conducted by occupational therapists (100%) and social workers (90%). Table 5.9 presents the clinical process activities described as therapy.

Table 5. 9: Self-reported activities performed by each discipline - Clinical process - therapy

Activity	Disciplines				
	%Nursing (n=154)	%Occupational Therapy (n=25)	%Psychiatry (n=61)	%Psychology (n=44)	%Social Work (n=32)
Counselling	91	91	96	95	97
Consumer Intervention	94	100	98	92	90
Hospital Inreach	53	36	31	36	**54***
Visit Burwood Respite	26	48	4	21	62
Ward Visit	65	83	67	74	89
Interpreter Assessment	50	82	**98***	68	67
Phone Counselling	59	52	47	76	**83***
Clinical/Care Review	85	78	96	90	86
Care Review Meeting	88	100	96	90	93
Feedback	92	91	94	92	93
Medication Supervision	**88***	48	50	13	28
Individual Therapy	72	96	85	87	72
Create Food Diary Template	36	**59***	4	31	7
Encourage Consumer to Engage in Social Activity	93	100	92	92	90
Psychological Therapy	48	30	**85***	**89***	66
Psychoeducation	78	95	94	97	86
Groups	76	**91***	25	79	79
DBT Supervision	27	35	10	**55***	31

Clinical process - therapy consisted of counselling, consumer interventions, hospital inreach (community staff visiting consumers after an admission for inpatient care), visiting Burwood respite (step-up/step-down brief stay unit), ward visits, interpreter assessments, phone counselling, clinical/care reviews, care review meetings, providing feedback, medication supervision, individual therapy, creating food diary templates, encouraging consumers to

engage in social activity, psychological therapy, psychoeducation, groups and DBT supervision. All five disciplines reported engaging in these activities, other than medication supervision most frequently performed by nurses (88%) and psychological therapy that was most frequently performed by psychologists (89%) and psychiatrists (85%). Activities involving continuity of care are presented in Table 5.10.

Table 5. 10: Self-reported activities performed by each discipline - Clinical process – continuity of care

Activity	**Disciplines**				
	%Nursing (n=154)	**%Occupational Therapy (n=25)**	**%Psychiatry (n=61)**	**%Psychology (n=44)**	**%Social Work (n=32)**
Case Consultation	71	96	**100***	97	90
Consumer Discharge	80	74	**98***	63	72
Student Clinical Placement	74	87	83	59	**90***
Receive Clinical Supervision	81	91	79	90	**97**
Provide Clinical Supervision	52	48	**81***	69	72
Handover Meeting	93	**100***	98	79	86
MDT Input over Consumer Care	87	87	**92**	74	78
Clinical Notes/Documentation	95	**100**	**100**	97	93
Liaise with Pharmacy	**90***	39	89*	23	34

Clinical process - continuity of care consisted of case consultation, consumer discharge, student clinical placements, receiving clinical supervision, providing clinical supervision, attending handover meetings, MDT input over consumer care, clinical notes/documentation and liaising with pharmacy. Nurses reported they were least likely to be involved in case consultation (71%). Nurses (52%) and occupational therapists (48%) reported they were least likely to be involved in providing clinical supervision. Psychiatrists reported to be most likely involved in consumer discharges (98%). Nurses (90%) and psychiatrists (89%) reported being most likely responsible for liaising with pharmacy. Activities involving external support agencies are presented in Table 5.11.

Table 5. 11: Self-reported activities performed by each discipline - Activities related to external providers

Activity	Disciplines				
	%Nursing (n=154)	%Occupational Therapy (n=25)	%Psychiatry (n=61)	%Psychology (n=44)	%Social Work (n=32)
Care Co-Ordination (e.g. deliver Webster Pack)	54	**57***	19	30	39
Liaison with service Providers	86	100	91	90	100
Financial Management Order Hearing	37	65	40	33	**86***
Applications JD, DoH, DSP	28	**87***	55	35	**86***
Assist Consumer with Legal Aid	44	52	25	28	**82***
Consumer Escort/Travel	**86***	**87***	11	33	**86***
Follow-Up Housing, Other Forms	40	91	26	40	**93***
Writing Support Letters	48	**96***	92	80	**96***
CTO Hearing	61	74	**77***	30	68

Activities related to external providers consisted of care co-ordination, (e.g. delivering Webster packs), liaison with service providers, financial management order hearings, applications to various services such as Social Housing and Centrelink, assisting consumers with Legal Aid, consumer escorts and travel, following-up housing and other forms, writing support letters and Community Treatment Order (CTO) hearings. Occupational therapists (57%) and nurses (54%) reported to be most likely involved in care coordination. Social workers (86%) reported to be most likely involved in financial management order hearings. Occupational therapists (87%), nurses (86%) and social workers (86%) reported being most likely involved in organising consumer escorts and travel. Social workers (93%) and occupational therapists (91%) reported being most likely involved in following up housing and other forms. Social workers (96%) and occupational therapists (96%) also reported being most likely involved in writing support letters. Of note, psychiatrists were least likely to be involved in consumer escort and travel (11%), and care coordination (19%).

Table 5.12 presents the support activities required to ensure continuity of care.

Table 5. 12: Self-reported activities performed by each discipline - Continuity and support activities

Activity	**Disciplines**				
	%Nursing (n=154)	**%Occupational Therapy (n=25)**	**%Psychiatry (n=61)**	**%Psychology (n=44)**	**%Social Work (n=32)**
Search for Consumer in Community	33	**45***	15	28	37*
Complete CTO	27	**41**	40	25	30
Serve CTO	33	**36***	12	23	30
Breach CTO	27	36	15	23	30
Provide Carer Support	75	91	74	78	81
Family Meeting	79	**95***	94	90	89
Attend GP Appointment with Consumer	38	**50***	6	18	37
Organise Consumer Belongings	70	**73***	4	15	56
Assist Consumer Clean Room/Unit/ Accommodation	54	**77***	2	10	63
Create Repayment Schedule for Consumer	25	55	4	13	**63***
Assist Consumer with Shopping	58	**95***	4	3	65

Non-Clinical continuity and support activities (Table 5.12) consisted of searching for consumers in the community, completing CTO documents, serving CTOs, breaching CTOs, providing carer support, family meetings, attending GP appointments with consumers, organising consumer belongings, assisting consumers clean their room, unit or other accommodation, creating a repayment schedule for consumers and assisting consumers with shopping. Most of these activities do not require discipline specific skills. Apart from the provision of carer support and family meetings, occupational therapists reported being most likely to be involved in these activities, followed closely by nursing and social work. Of note

was that psychiatrists and psychologists were least likely to perform any continuity and support activities.

5.4.2 How Much Time is Spent by Each Discipline on Performing these Activities?

Figure 5.1 presents the average time spent by all staff engaged in discipline specific and generic activity.

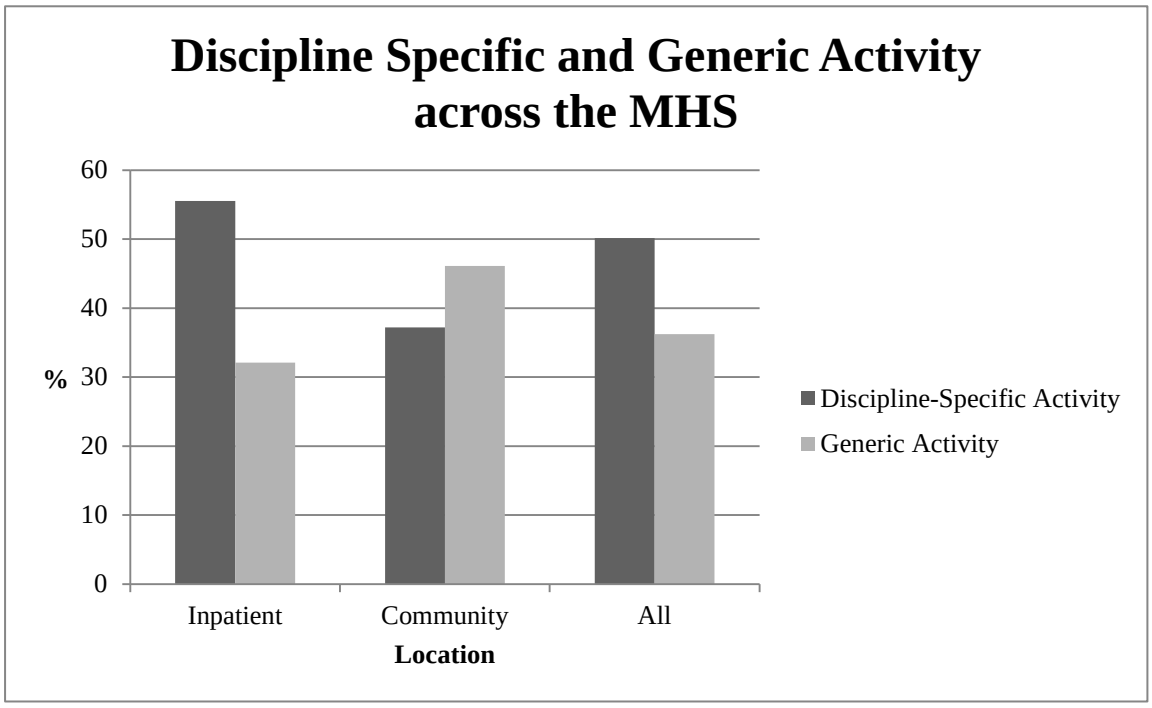


Figure 5. 1: Discipline specific and generic activity across the MHS

The study assessed how much time clinicians spent performing activities that required discipline specific skills in providing care to consumers of the mental health service. Staff on inpatient units reported spending 55.51% (n=216, SD 26.65) of their day on discipline specific activities and those on community teams reported spending 37.22% (n=90, SD 27.77) of their day on discipline specific activities. Staff on inpatient units reported spending 32.08% (n=216, SD 20.31) of their day on generic activities and those on community teams reported spending 46.11% (n=90, SD 30.35) of their day on generic activities.

Staff on inpatient units reported spending more time performing discipline specific activities than on community teams.

Figure 5.2 presents the average time spent by each discipline performing discipline specific and generic activities.

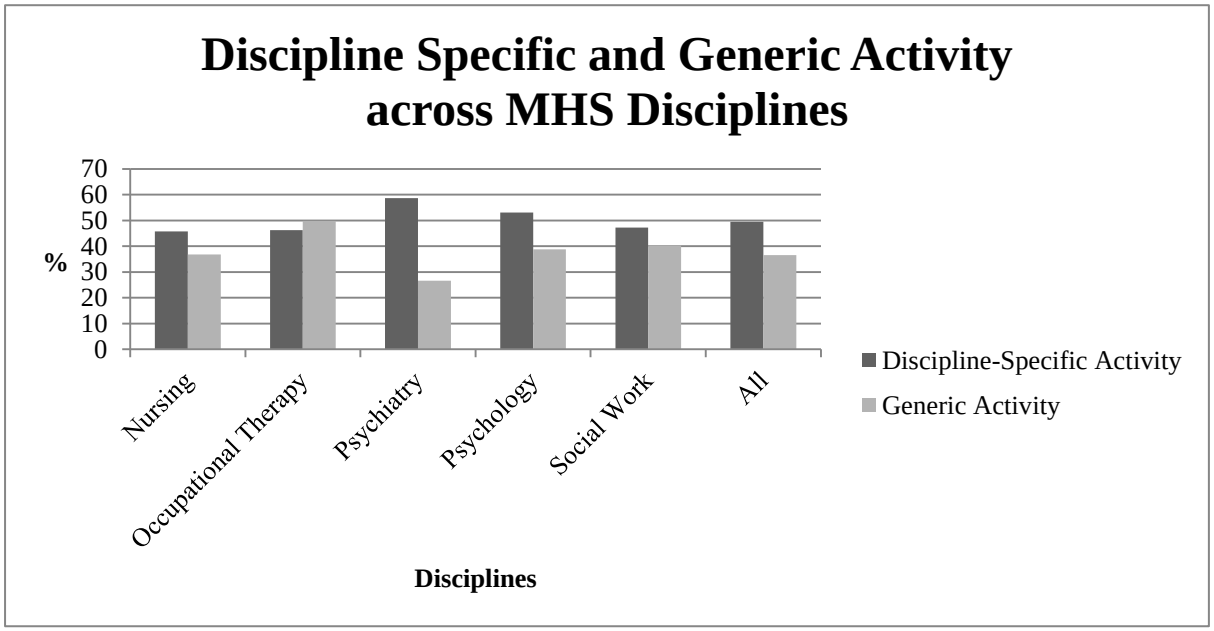


Figure 5. 2: Discipline specific and generic activity across MHS disciplines

Across the mental health service, nurses reported spending 45.78% (n=154, SD 28.36) of their day engaged in discipline specific activities, occupational therapists 46.20% (n= 25, SD 22.51), psychiatrists 58.69% (n= 61, SD 29.59), psychologists 53.07% (n= 44, SD 28.53) and social workers 47.19% (n= 32, SD 29.43). Psychiatrists and psychologists spent the most time on discipline-specific activities and nurses the least amount of time on discipline-specific activities.

Across the mental health service, nurses reported spending 36.82% (n=154, SD 25.29) of their day engaged in generic activities, occupational therapists 49.8% (n= 25, SD 22.84), psychiatrists 26.56% (n= 61, SD 18.31), psychologists 38.72% (n= 44, SD 25.57) and social workers 40.31% (n= 32, SD 27.89). Occupational therapists spent the most time and psychiatrists the least time performing generic activities.

Psychiatrists reported spending the most time performing discipline specific activities and the least time performing generic activities. Occupational therapists reported spending the most time performing generic activities.

Figure 5.3 presents the average time spent by each discipline performing discipline specific and generic activities on inpatient units.

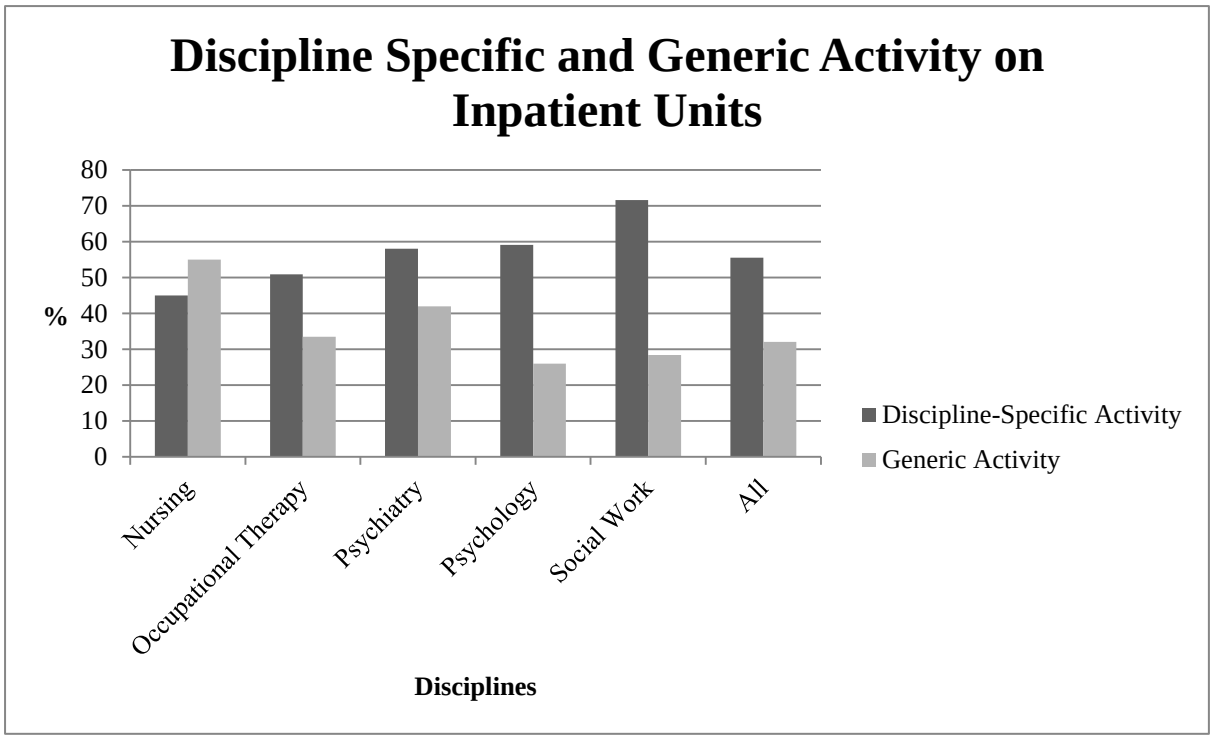


Figure 5. 3: Discipline specific and generic activity on inpatient units

On inpatient units, nurses reported spending 45.00% (n=120, SD 28.36) of their day engaged in discipline specific activities, occupational therapists 50.88% (n=15, SD 27.5), psychiatrists 58.00% (n= 47, SD 28.5), psychologists 59.15% (n= 16, SD 28.50) and social workers 71.56% (n= 17, SD 19.30). Social workers spent most time on discipline-specific activities and nurses the least time on discipline-specific activities.

On inpatient units, nurses reported spending 55.00% (n=120, SD 21.70) of their day engaged in generic activities, occupational therapists 33.46% (n =15, SD 21.70), psychiatrists 42.00% (n=47, SD 9.96), psychologists 25.96% (n=16, SD 17.53) and social workers 28.44% (n=17, SD 19.30). Nurses spent the most time and psychologists the least time performing generic activities.

On inpatient units, social workers reported spending the most time on discipline specific activities and nurses reported spending the least time on discipline specific activities. Nurses reported spending the most time on generic activities and psychologists reported spending the least time on generic activities.

Figure 5.4 presents the average time spent by each discipline performing discipline specific and generic activities on community teams.

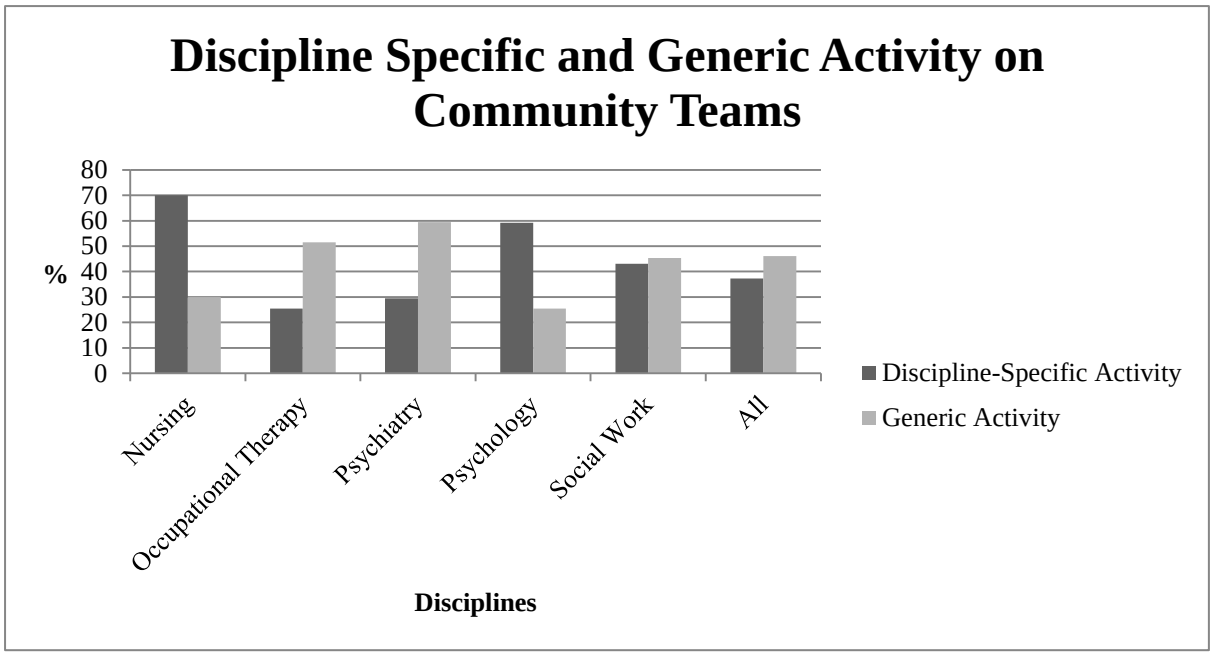


Figure 5. 4: Discipline specific and generic activity on community teams

On community teams, nurses reported spending 70.00% (n=26, SD 21.70) of their day engaged in discipline specific activities, occupational therapists 25.38% (n=9, SD 21.77), psychiatrists 29.44% (n=13, SD 26.15), psychologists 59.23% (n=26, SD 30.01) and social workers 43.08% (n=15, SD 27.02). Nurses spent most time on discipline-specific activities and occupational therapists the least time on discipline-specific activities.

On community teams, nurses reported spending 30.00% (n=26, SD 21.70) of their day engaged in generic activities, occupational therapists 51.54% (n=9, SD 33.19), psychiatrists 59.44% (n=13, SD 32.54), psychologists 25.38% (n=16, SD 18.42) and social workers 45.38% (n=15, SD 27.53. Psychiatrists spent the most time and psychologists the least time performing generic activities.

On community teams, nurses reported spending the most time performing discipline specific activities and occupational therapists reported spending the least time performing discipline specific activities. Psychiatrists reported spending the most time performing generic activities and psychologists reported spending the least time performing generic activities.

A summary of key results is presented in Table 5.13 below; see Appendix 27, pp.343-364, for the full analysis and explanation.

Table 5. 13: Summary of key results to sub-questions 1.1 and 1.2- Activities

Description of Analysis and Associated Table	Key Finding
A comparison of the amount of time each discipline spends performing discipline specific and generic activities (Table 1).	There was a significant difference in time spent performing discipline specific activities between disciplines. Psychiatrists spent the most time performing discipline specific activities and the least time performing generic activities.
The amount of time each discipline spends performing discipline specific and generic activities on inpatient units was compared (Table 2).	There was a significant difference between disciplines on inpatient units in time spent performing discipline specific activities. Social workers spent most time performing discipline specific activities. There was no significant difference between disciplines on inpatient units in time spent performing generic activities.
The amount of time each discipline spends performing discipline specific and generic activities on community teams was compared (Table 3).	There was a significant difference between disciplines on community teams in time spent performing discipline specific activities. Nurses spent most time performing discipline specific activities. There was no significant difference between disciplines on community teams in time spent performing generic activities.
The average amount of time spent by all disciplines on discipline specific activity in inpatient and community work locations was compared (Table 4).	Staff on inpatient units spent 23% more time performing discipline specific activities than staff on community teams. This difference was significant.
The average amount of time nurses spent performing discipline specific and generic activities was compared (Table 5)	Across the mental health service, nurses spent significantly more time performing discipline specific activities.
The average amount of time nurses spent performing discipline specific and generic activities on inpatient units was compared (Table 6).	On inpatient teams, while nurses spent more time performing generic activities than discipline specific activities, the difference was not statistically significant.
The average amount of time nurses spent performing discipline specific and generic activities on community teams was compared (Table 7).	On community teams, nurses spent significantly more time performing generic activities than discipline specific activities.
The average amount of time occupational therapists spent performing discipline specific and generic activities was compared (Table 8).	Across the mental health service, occupational therapists spent the same amount of time performing discipline specific and generic activities.
The average amount of time occupational therapists spent performing discipline specific and generic activities on inpatient units was compared (Table 9).	On inpatient units, occupational therapists spent significantly more time performing discipline specific activities than generic activities.
The average amount of time occupational therapists spent performing discipline specific and generic activities on community teams was compared (Table	On community teams, occupational therapists spent significantly more time performing generic activities than discipline specific activities.

Description of Analysis and Associated Table	Key Finding
10).	
The average amount of time psychiatrists spent performing discipline specific and generic activities was compared (Table 11).	Across the mental health service, psychiatrists spent significantly more time performing discipline specific activities.
The average amount of time psychiatrists spent performing discipline specific and generic activities on inpatient units was compared (Table 12).	On inpatient units, psychiatrists spent significantly more time performing discipline specific activities than generic activities.
The average amount of time psychiatrists spent performing discipline specific and generic activities on community teams was compared (Table 13).	On community teams, psychiatrists spent significantly more time performing generic activities than discipline specific activities.
The average amount of time psychologists spent performing discipline specific and generic activities was compared (Table 14).	Across the mental health service, psychologists spent significantly more time performing discipline specific activities.
The average amount of time psychologists spent performing discipline specific and generic activities on inpatient units was compared (Table 15).	On inpatient units, psychologists spent significantly more time performing discipline specific activities than generic activities.
The average amount of time psychologists spent performing discipline specific and generic activities on community teams was compared (Table 16).	On community teams, psychologists spent significantly more time performing discipline specific activities than generic activities.
The average amount of time social workers spent performing discipline specific and generic activities was compared (Table 29).	Across the mental health, service social workers spent the same amount of time performing discipline specific and generic activities.
The average amount of time social workers spent performing discipline specific and generic activities on inpatient units was compared (Table 17).	On inpatient units, social workers spent significantly more time performing discipline specific activities than generic activities.
The average amount of time social workers spent performing discipline specific and generic activities on community teams was compared (Table 18).	On community teams, social workers spent the same amount of time performing discipline specific and generic activities.

5.5 Summary

There was a significant difference between disciplines in time spent performing discipline specific and generic activities. Psychiatrists spent the most time in discipline specific activity and the least amount of time in generic activity. There was a significant difference between time spent by staff on discipline specific activity on inpatient units and community teams. Staff on inpatient units spent more time engaged in discipline specific activity. Staff on community teams spent more time engaged in generic activity.

5.6. Skills - Question 2

This section presents the results of research sub-questions 2.1 and 2.2. Questions 2.1 and 2.2 are related to the skills required in providing care to consumers of the mental health service and which discipline has those skills. The questions are presented in Table 5.14 below.

Table 5. 14: Skills

Themes	Question	Method	
		Instrument	Interview
2.Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?	MHAC	Q2,3,4,5
	2.2 Who does each discipline believe should perform these activities?	MHAC	Q2,3,4,5

5.6.1 Do the Activities Performed by Each of the Five Disciplines Require Generic or Specific Skills?

Figure 5.5 demonstrates that a combination of discipline specific and generic skills is performed by staff of the public mental health service in the provision of care to consumers.

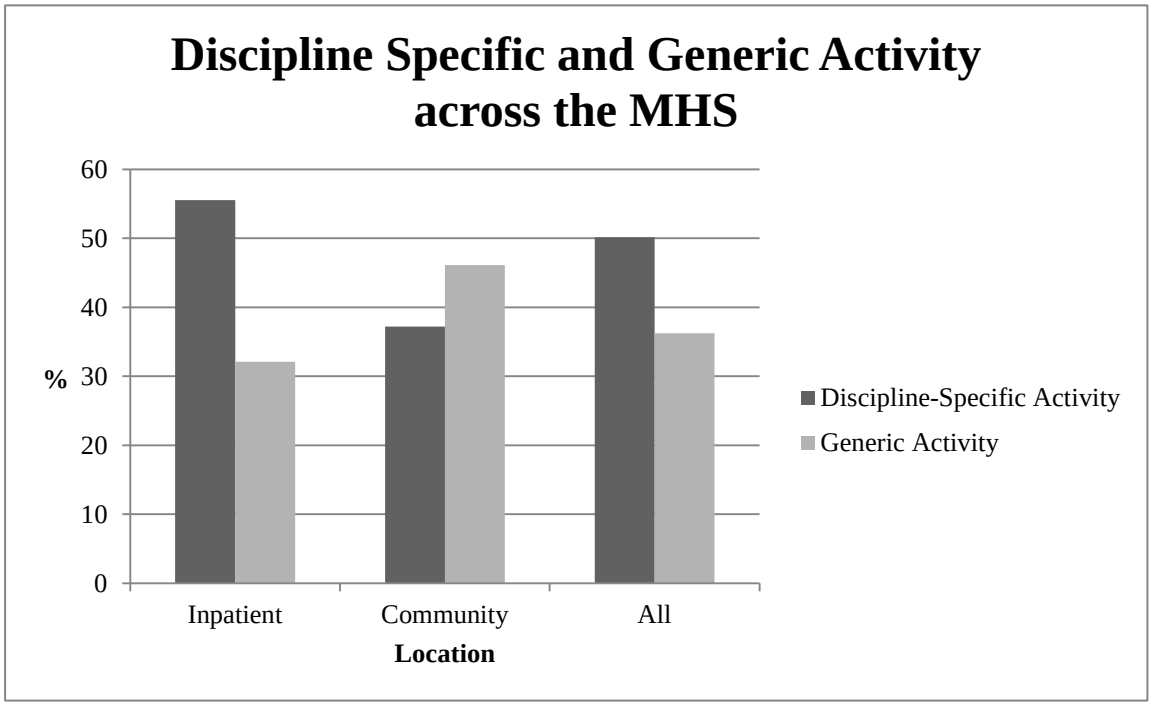


Figure 5. 5: Discipline specific and generic activity across the MHS

On inpatient units, staff generally spent about twice as much time engaged in discipline specific activities. On community teams, staff generally spent about one third of their time engaged in discipline specific activities. The numbers do not total 100 due to missing values and misinterpretation of the question by respondents.

Staff on inpatient units reported spending 55.51% (n=216, SD 26.65) of their day on discipline specific activities and those on community teams reported spending 37.22% (n=90, SD 27.77) of their day on discipline specific activities. The difference was statistically significant (Type 3 Test, p=<.0001) with inpatient staff spending more time performing discipline specific activities daily.

Staff on inpatient units reported spending on average 32.08% (n=216, SD 20.31) of their day on generic activities and those on community teams reported spending on average 46.11% (n=90, SD 30.35) of their day on generic activities. The difference was statistically significant (Type 3 Test, p=<.0001) with community staff spending more time performing generic activities daily (see 5.4.2 for this analysis). Overall, psychiatrists reported spending the most time performing discipline specific activities and the least time performing generic activities.

A combination of discipline specific and generic skills is performed by each of the five disciplines. Generally, staff on inpatient units spent more time performing discipline specific activities than staff on community teams.

Table 5.15 lists the top 20 activities engaged in by each discipline as reported by all respondents. The figures are presented in percentages. The white cells show discipline specific activities with impenetrable boundaries. These boundaries are regulated and vigorously protected. The light grey cells show horizontal substitution, i.e. the crossover of activities between professional groups of equal status and training. The darker grey cells show vertical substitution, i.e. activities shared by professional groups of unequal status and training.

Table 5. 15: Top 20 discipline specific activities identified by all disciplines

Activity Number	Disciplines				
	Nursing (N=316) %	**Occupational Therapy (N=316) %**	**Psychiatry (N=316)%**	**Psychology (N=316)%**	**Social Work (N=316)%**
1	Give Medication Oral and IMI (88)	Living Skills Assessment (71)	Medication Prescribing (86)	DBT Consultation (72)	Follow-Up Housing-Other Forms (62)
2	One-to-One Nursing Care (85)	Assist Consumer with Shopping (53)	Medication Review (84)	Psychological Therapy (59)	Assist with Legal Aid (59)
3	Administer PRN Medication (84)	Outing with Consumers (51)	Pathology Requests (83)	DBT Group (57)	Create Repayment Schedule (59)
4	Nurses Meeting (83)	Assist Consumer with Legal Aid (39)	Review Medical/Blood Results (79)	Individual Therapy (39)	Applications JD, DoH, DSP (54)
5	Supervise Consumer Bathing (82)	Assist Consumer Clean Room (37)	Referrals (78)	Phone Counselling (34)	Financial Management Order Hearing (54)
6	Nursing Ward Rounds (81)	Assist Consumer Wash Clothes (33)	Patient Medical Assessment/Review (69)	Financial Management Order Hearing (28)	Assist Consumer Clean Room (46)
7	Assist Consumer Wash Clothes (75)	Create Repayment Schedule (32)	Legal Activity (MHA) Schedules (60)	Psychoeducation (23)	Assist Consumer with Shopping (43)
8	Medication Supervision (68)	Organise Consumer Belongings (32)	ccCHIP Referral Form Completion (53)	Groups (22)	Organise Consumer Belongings (41)
9	Supervise Meal Times (68)	Attend GP Appointment with Consumer (31)	Liaise with Pharmacy (51)	Attend GP Appointment with Consumer (19)	Attend GP Appointment with Consumer (39)
10	Clozapine Clinic (59)	Supervise Consumer Bathing (28)	Clozapine Clinic (47)	Care-Coordination (19)	Write Support Letters (34)

Activity Number	Disciplines				
	Nursing (N=316) %	**Occupational Therapy (N=316) %**	**Psychiatry (N=316)%**	**Psychology (N=316)%**	**Social Work (N=316)%**
11	Liaise with Pharmacy (54)	Create Food Diary Template (27)	CTO Hearing (40)	Write Support Letters (18)	Search for Consumer in Community (33)
12	Outing With Consumers (51)	Groups (27)	Psychiatry Review in Home with Registrar (37)	Mental Health Assessment (17)	Home Visits (28)
13	Organise Consumer Belongings (51)	Care-Coordination (19)	Complete CTO (36)	Mental State Examination (16)	Visit Burwood Respite (28)
14	Create Repayment Schedule (50)	Follow-Up Housing Forms (19)	Medication Supervision (35)	Search for Consumer in Community (15)	Care Coordination (25)
15	Assist Consumer with Legal Aid (50)	Search for Consumer in Community (18)	Mental Health Assessment (33)	Breach CTO (15)	DBT Group (22)
16	Care Co-Ordination (47)	Writing Support Letters (14)	Mental State Examination (32)	Serve CTO (13)	CTO Hearing (21)
17	Assist Consumer Clean Room (45)	Encourage Consumer to Engage in Social Activity (14)	Consumer Discharge (29)	Create Repayment Schedule (13)	Breach CTO (20)
18	Attend GP Appointment with Consumer (44)	Breach CTO (13)	Breach CTO (28)	Risk Assessment (12)	Serve CTO (19)
19	Assist Consumer with Shopping (42)	Financial Management Order Hearing (12)	Give Medication Oral and IMI (28)	Complete CTO (12)	Groups (18)
20	Search for Consumer in Community (37)	Complete/Serve CTO (11)	Psychological Therapy (26)	Organise Consumer Belongings (12)	Complete CTO (18)

Of note is the blurring of roles between nursing, occupational therapy, psychology and social work. Psychiatry has the most impenetrable boundaries in relation to medication and the medical and legal care of consumers. Some of the activities performed by psychiatrists were shared with nurses, for example, giving oral and IMI medication, supervising medication, liaising with pharmacy and the clozapine clinic. This is referred to as vertical substitution. Psychiatry also shared some activities with psychology, namely, mental health assessments, mental state examinations and psychological therapy. This is another example of vertical substitution.

The majority of activities appear to be shared by nursing, occupational therapy, psychology and social work. Table 5.15 illustrates both horizontal substitution (pale grey highlighted activities) and vertical substitution (darker grey highlighted activities between nursing and psychiatry and psychology and psychiatry). High percentages indicate a strong perception among the respondents that the activity is most frequently associated with that particular discipline. The results illustrate the roles of occupational therapists, psychologists and social workers are poorly understood within the mental health service.

Table 5.16 provides a list of additional activities that were not captured by the MHAC. While the MHAC attempted to capture most activities performed by staff of the mental health service, it was not exhaustive. A free text question in the survey questionnaires allowed participants an opportunity to list other activities that were not in the MHAC.

Nurses identified six other activities, (1) completing audits, (2) staff rostering, (3) attending to duress calls, (4) contacting families and carers, (5) reviewing policies and (6) IIMS (managing incidents). Occupational therapists identified six other activities, (1) program development, (2) skills training, (3) travel training, (4) sensory interventions, (5) cooking group and (6) vocational rehabilitation. Psychiatrists identified four other activities, (1) peer review, (2) second opinions, (3) mentoring and (4) publication.

Psychologists identified 10 other activities they performed and believed were missing from the MHAC. The activities are (1) cognitive testing, (2) interviewing family members and carers, (3) reviewing research, (4) conducting behavioural experiments, (5) providing and supervising CBT, (6) writing behaviour management plans, (7) conducting personality assessments, (8) evaluating therapy, (9) neuropsychological assessments and (10) collecting collateral information for assessments and reports. Social Workers identified four other

Table 5. 16: Additional discipline specific activities identified by all disciplines

Activity	Disciplines				
	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**
1	Audits	Program Development	Peer Review	Cognitive Testing	Interagency Liaison
2	Staff Rostering	Skills Training	Second Opinions	Interviewing Family	Advocacy
3	Duress Calls	Travel Training	Mentoring	Reviewing Research	Family Therapy
4	Contact with Family/Carers	Sensory Interventions	Publication	Behavioural Experiments	FACS Notifications
5	Policy Reviews	Cooking Group		CBT	
6	IIMS	Vocational Rehabilitation		Behaviour Management Plans	
7				Personality Assessments	
8				Evaluating Therapy	
9				Neuropsychological Assessments	
10				Collecting Collateral	

activities they thought should be included in the MHAC. These activities are (1) interagency liaison, (2) advocacy, (3) family therapy and (4) FACS notifications. Of note, three of the disciplines, nursing, psychology and social work identified working with family by interviewing and gathering collateral information or family therapy as missing from the MHAC. Again, this illustrates crossover of activities between these professional groups.

Table 5.17 comprises the top 20 generic activities that mental health service staff perform based on the original MHAC. This table does not include the additional activities the groups identified as missing from the MHAC.

Of note is that the top five activities relate to clinical documentation, communication and professional development activities through mandatory training or continued professional development (CPD). The latter is a requirement under national legislation and annual registration. Of some surprise is the fact that 92% of occupational therapists reported being engaged with research. This figure is higher than the other four professional groups.

Table 5. 17: Top 20 generic activities identified by all disciplines

Activity Number	Activity	**Disciplines**					
		All (N=316) %	**Nursing (n=154) %**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=32)%**
1	Learning & Development	84	79	88	80	89	82
2	Emails & Correspondence	84	81	92	85	85	91
3	Powerchart/eMR	82	76	92	84	91	84
4	Mandatory Training	82	79	92	79	89	84
5	Professional Development	82	79	92	79	91	84
6	Clinical Notes/Documentation	82	76	92	80	91	91
7	Feedback	81	78	88	84	80	81
8	Handover Meeting	80	73	92	84	88	80
9	Receive Operational Supervision	79	75	88	77	86	84
10	Care Review Meeting	79	74	88	80	86	79
11	Administrative Tasks	78	70	88	82	89	91
12	Orientation New Staff	78	71	88	79	86	84
13	MDT Input over Consumer Care	78	74	88	80	82	81
14	Correspondence with Senior Clinicians	78	75	92	72	86	84
15	Support Distressed Consumer	77	71	88	82	82	78
16	Teaching	77	73	84	74	86	81
17	Staff Performance Management	76	68	88	80	86	84
18	Case Consultation	76	71	88	70	89	76
19	Student Clinical Placement	76	67	88	79	91	76
20	Research	75	71	92	74	77	75

5.6.2 Summary

The five professional groups in the mental health service engage in both discipline specific and generic activities in the provision of care to consumers of the mental health service. The top 20 activities performed by each professional group are mostly generic activities involving significant crossover between the five groups. Horizontal substitution was most evident between nursing, occupational therapy, psychology and social work. Vertical substitution was most evident between psychiatry and nursing, as well as psychiatry and psychology. Psychiatrists spent the most time engaged in discipline specific activity and the least time on generic activities. This is a significant finding as it suggests that professional groups with impermeable boundaries spend more time in discipline specific activity.

5.6.3 Who does Each Discipline Believe Should Perform these Activities?

This section addresses the question who does each discipline believe should perform the activities required in the provision of care to consumers of the mental health service.

5.6.3.1 Nurses

Table 20 (see Appendix 27) comprises the top 10 activities that each discipline engages in on a daily basis as perceived by nurses. Nurses were asked to indicate which activities they performed and then to indicate which activities they believed occupational therapists, psychiatrists, psychologists and social workers performed. Results are presented in percentages.

Nurses perceived their role to be primarily related to medication and the physical care of consumers. They perceived occupational therapy to be concerned with activities of daily living; psychiatrists with the psychiatric, medical and legal care of consumers; psychologists with psychological interventions conducted individually, in groups or by telephone. Nurses perceived the social work role to be concerned with advocating for consumers with external providers regarding legal, financial and accommodation needs. The results indicate that nurses have a poor understanding of the discipline specific skills of occupational therapists, psychologists and social workers.

Nurses perceived their role to be primarily concerned with medication and the physical care of consumers.

5.6.3.2 Occupational Therapists

Table 21 (Appendix 27) comprises the top 10 activities that each discipline engages in on a daily basis as perceived by occupational therapists. Occupational therapists were asked to indicate which activities they performed and then to indicate which activities they believed, nurses, psychiatrists, psychologists and social workers performed. Results are presented in percentages.

Occupational therapists perceived their role to be primarily concerned with the daily functioning of consumers and the provision of groups. They perceived the nurses' role to be primarily concerned with medication and the physical care of consumers; psychiatrists with the psychiatric and medical care of consumers; psychologists with psychological care of consumers and the social workers' role to be concerned with advocating for consumers with external providers regarding legal, financial, daily living and accommodation needs. Occupational therapists perceived their role to be most similar to social workers.

Occupational therapists perceived their role to be primarily concerned with daily functioning of consumers and the provision of groups.

5.6.3.3 Psychiatrists

Table 22 (see Appendix 27) comprises the top 10 activities that each discipline engages in on a daily basis as perceived by psychiatrists. Psychiatrists were asked to indicate which activities they performed and then to indicate which activities they believed, nurses, occupational therapists, psychologists and social workers performed. Results are presented in percentages.

Psychiatrists perceived their role to be the provision of psychiatric, medical, legal and psychological care to consumers. They perceived the nurses' role to be primarily related to medication and the physical care of consumers. They perceived occupational therapy to be concerned with activities of daily living; psychiatrists with the medical and legal care of consumers; psychologists with psychological interventions conducted individually, in groups or by telephone. Psychiatrists perceived the social work role to be concerned with advocating for consumers with external providers regarding legal, financial and accommodation needs.

Psychiatrists perceived their role to be the provision of psychiatric, medical and legal care to consumers.

5.6.3.4 Psychologists

Table 23 (see Appendix 27) comprises the top 10 activities that each discipline engages in on a daily basis as perceived by psychologists. Psychologists were asked to indicate which activities they performed and then to indicate which activities they believed, nurses, occupational therapists, psychiatrists and social workers performed. Results are presented in percentages.

Psychologists perceived their role to be the delivery of psychological therapies (individual and group) and mental health assessments in the provision of care to consumers of the public mental health service. They perceived the nursing role to be primarily concerned with medication and the physical care of consumers. Psychologists perceived occupational therapy to be concerned with activities of daily living; psychiatrists with the medical and legal care of consumers and social workers to be concerned with advocating for consumers with external providers regarding legal, financial, social and accommodation needs. Of note is that only 77% of psychologists indicated they provide psychological therapy.

Psychologists perceived their role to be the delivery of psychological therapies and mental health assessments.

5.6.3.5 Social Workers

Table 24 (see Appendix 27) comprises the top 10 activities that each discipline engages in on a daily basis as perceived by social workers. Social workers were asked to indicate which activities they performed and then to indicate which activities they believed, nurses, occupational therapists, psychiatrists and psychologists performed. Results are presented in percentages.

Social workers perceived their role to be concerned with advocating for consumers with external providers regarding legal, financial, daily living and accommodation needs. Additionally, social workers perceived their role as meeting the psychological needs of consumers by providing therapy both group and individual. They perceived the nursing role to be primarily related to medication and the physical care of consumers. Social workers perceived occupational therapy to be concerned with activities of daily living and the provision of groups; psychiatrists with the psychiatric, medical and legal care of consumers and psychologists with psychological interventions conducted individually, in groups or by telephone.

Social Workers perceived their role to be to be advocacy for consumers with external providers and the provision of therapy.

5.6.3.6 Level of Agreement between Disciplines Regarding Roles

The next section presents data on the level of agreement between the five professional groups as to which activities are provided by which group. Tables 25-29 (see Appendix 27) demonstrate the level of agreement between professional groups.

5.6.3.7 Level of Agreement between Disciplines Regarding the Role of Nurses

The first column in Table 25 (see Appendix 27) presents the list of top 10 activities nurses reported they provide in the care of consumers of the mental health service. The other columns provide the list of top 10 activities the four other professional groups believe are provided by nurses.

Table 25 indicates a high degree of agreement between the perception of nurses and the other four disciplines about the top 10 activities that nurses perform in the provision of care to consumers. Of note, only occupational therapists nominated group work and outings with consumers, which is a departure from a medication and physical care focus.

The top 10 nursing activities were Give Medication Oral and IMI (89), Administer PRN Medication (86), Supervise Consumer Bathing (84), One-to-One Nursing Care (82), Assist Consumer Washing Clothes (79), Nurses Meeting (79), Nursing Ward Rounds (76), Medication Supervision (71), Supervise Meal Times (70), Clozapine Clinic (58). All 10 of these activities are nursing specific.

There was agreement that the nursing role was primarily concerned with medication and the physical care of consumers.

5.6.3.8 Level of Agreement between Disciplines Regarding the Role of Occupational Therapists

The second column in Table 26 (see Appendix 27) presents the list of top 10 activities occupational therapists reported they provide in the care of consumers of the mental health service. The other columns provide the list of top 10 activities the four other professional groups believe are provided by occupational therapists.

Table 26 indicates a high degree of agreement between the perception of occupational therapists and the other four disciplines about the top 10 activities that occupational therapists perform in the provision of care to consumers. Of note, only occupational therapists and social workers identified group work in the top 10 list of activities. Similarly, occupational therapists identified applications to various service providers as one of their top 10 activities. This is primarily associated with the role of social workers.

The top 10 occupational therapy activities were Living Skills Assessment (88), Groups (60), Assist Consumer Washing Clothes (60), Supervise Consumer Bathing (60), Assist Consumer with Shopping (60), Assist Consumer with Legal Aid (60), Follow-up Housing and Other Forms (56), Outing with Consumers (56), Applications to JD, DoH, DSP (48) and Create Food Diary Template (44). Only Living Skills assessment is an occupational therapy specific activity.

There was agreement that the occupational therapy role was primarily concerned with activities of daily living and the provision of groups.

5.6.3.9 Level of Agreement between Disciplines Regarding the Role of Psychiatrists

The third column in Table 27 (see Appendix 27) presents the list of top 10 activities psychiatrists reported they provide in the care of consumers of the mental health service. The other columns provide the list of top 10 activities the four other professional groups believe are provided by psychiatrists.

Table 27 indicates a high degree of agreement between the perception of psychiatrists and the other four disciplines about the top 10 activities that psychiatrists perform in the provision of care to consumers. Of note, psychiatrists also perceived their role as including psychological therapy but this was not identified by the other four disciplines.

The top 10 psychiatry activities were Medication Prescribing (90), Medication Review (90), Review Medical/Blood Results (89), Pathology Requests (89), Patient Medical Assessment (82), Legal Activity (MHA) Schedules (70), Clozapine Clinic (69), Liaise with Pharmacy (59), Psychiatry Review in Home with Registrar (52) and Psychological Therapy (51).

There was agreement that the psychiatry role was primarily concerned with the psychiatric, medical and legal care of consumers.

5.6.3.10 Level of Agreement between Disciplines Regarding the Role of Psychologists

The fourth column in Table 28 (see Appendix 27) presents the list of top 10 activities psychologists reported they provide in the care of consumers of the mental health service. The other columns provide the list of top 10 activities the four other professional groups believe are provided by psychologists.

Table 28 indicates a high degree of agreement between the perception of psychologists and the other four disciplines about the top 10 activities that psychologists perform in the provision of care to consumers. Of note, only nurses and psychiatrists identified outings with consumers in the top 10 activities. Similarly, mental health assessments and mental state examinations were not identified in the top 10 activities by nurses and occupational therapists.

The top 10 psychology activities were Psychological Therapy (77), DBT Group (66), Individual Therapy (66), DBT Consultation (66), Counselling (39), Phone Counselling (34), Mental Health Assessment (32), Mental State Examination (30), Groups (25) and Writing Support Letters (25).

There was agreement that the psychology role was primarily concerned with the delivery of psychological interventions conducted individually, in groups or by telephone.

5.6.3.11 Level of Agreement between Disciplines Regarding the Role of Social Workers

The last column in Table 29 (see Appendix 27) presents the list of top 10 activities social workers reported they provide in the care of consumers of the mental health service. The other columns provide the list of top 10 activities the four other professional groups believe are provided by social workers.

Table 29 indicates a high degree of agreement between the perception of social workers and the other four disciplines about the top 10 activities that social workers perform in the provision of care to consumers. Of note, only social workers identified that their role also encompasses psychological care of consumers through delivery of psychological interventions, e.g. DBT groups. The social work role appears to be focussed on liaison with service providers related to the financial, accommodation and daily living needs of consumers.

The top 10 social work activities were Follow-up Housing/Other Forms (63), Create Repayment Schedule for Consumer (61), Applications JD, DoH, DSP (59), Financial

Management Order Hearing (59), Assist Consumer with Legal Aid (59), Organise Consumer Belongings (59), Assist Consumer Clean Room (58), Assist Consumer with Shopping (58), DBT Group (53) and Attend GP Appointment with Consumer (52).

There was agreement that the social work role was primarily concerned with advocating for consumers with external providers

5.7 Summary

There appeared to be a high level of congruence between the five disciplines in terms of their perception of their own role and others perception of their role. There was agreement that the nursing role was primarily concerned with medication and the physical care of consumers. The occupational therapy role was primarily concerned with activities of daily living and the provision of groups. While not specified in the study, the groups appear to focus on recreational and vocational activities. The psychiatry role was primarily concerned with the psychiatric, medical and legal care of consumers. However, psychiatrists themselves also perceived their role to include the psychological care of consumers. The psychology role was perceived to be primarily concerned with the delivery of psychological interventions conducted individually, in groups or by telephone. Psychologists also saw their role as being concerned with mental health assessments (an umbrella term for psychometric, personality and forensic risk assessments). The social work role was perceived to be concerned with advocating for consumers with external providers regarding legal, financial, daily living and accommodation needs. Social workers also perceived their role to include the psychological care of consumers as well as family systems therapy and other family work. However, the understanding of each other's roles appeared to be superficial and stereotyped. Deeper understanding of the specific activities associated with each professional group was lacking. This was most apparent for the allied health professional groups.

5.8 Professional Identity – Question 3

This section answers subquestions 3.1 and 3.2 on professional identity. Professional identity is relevant because it is linked to the core activities and responsibilities of the professional role (Davies 2002). Questions 3.1 and 3.2 are presented in Table 5.18.

Table 5. 18: Professional Identity

Themes	Question	Method	
		Instrument	Interview
3.Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	PIS	
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	PIS, Q30	

5.8.1 What is the Strength of Professional Identity of Each of the Five Disciplines?

The Professional Identity Scale (PIS) was used to measure the strength of professional identity of each of the five disciplines in the mental health service.

5.8.2 The Professional Identity Scale

The Professional Identity Scale (PIS) used in this research was developed by Adams and colleagues (2006). It was selected because it is the only professional identity scale that has been used with allied health in previous research (Adams et al. 2006). It was the most robust of the available instruments for measuring professional identity (Cowin et al. 2013). The PIS consists of nine items, on a 7-point Likert scale ranging from 1 = Strongly Disagree to 7 Strongly Agree. The PIS has adequate psychometric properties with internal consistency of $\alpha = 0.79$ and factor loadings ranging from .46 to .73 (Adams et al 2006). The individual items of the PIS are included in Table 5.19 below.

Table 5. 19: The Professional Identity Scale items

1. I feel like I am a member of this profession
2. I feel I have strong ties with members of this profession
3. I am often ashamed to admit that I am a member of this profession
4. I find myself making excuses for belonging to this profession
5. I try to hide that I am a member of this profession
6. I am pleased to belong to this profession
7. I can identify positively with members of this profession
8. Being a member of this profession is important to me
9. I feel I share characteristics with other members of this profession

Cronbach's alpha is used to measure the internal consistency of an instrument. Internal consistency describes how closely a set of items are related and how well they measure the same construct (Orcher 2016). It is considered a measure of scale reliability. Internal consistency of the PIS in this study was Cronbach's alpha = 0.77. Instruments with an α coefficient between 0.65 and 0.8 are acceptable; but those with α coefficients that are less than 0.5 are usually unacceptable (Bryman 2015). Thus the internal consistency of the PIS of α = 0.77 was adequate. Table 5.20 shows the internal consistency of the PIS.

Table 5. 20: Internal consistency of the Professional Identity Scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.772	.775	9

The Kaiser-Meyer Olkin (KMO) and Bartlett's Test measure of sampling adequacy was used to assess the suitability of the data for factor analysis. The approximate of chi-square is 2137.130 with 36 degrees of freedom, which is significant at p=0.05 level of significance. A KMO statistic is considered large if is greater than 0.50. Here the KMO statistic was 0.846, which indicated that analysis of the data using factor analysis was appropriate.

Based on Varimax Rotation with Kaiser Normalisation, 2 components (see Appendix 28, light and dark grey) were extracted. Only those variables that have factor loadings greater than 0.5 made up each component. Factor analysis of the Professional Identity Scale indicated factor loadings of .82 to .92. A component that contains four or more factor loadings greater than 0.6, irrespective of sample size is considered reliable (Comrey & Lee 2013; Guadagnoli & Velicer 1988). Comrey and Lee (2013) have suggested the following cut-offs, 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent). The PIS with factor loadings of .82 to .92 can be considered reliable. The factor analysis of the PIS is presented in Appendix 28.

Table 5.21 presents the strength of professional identity of the five disciplines in both inpatient and community settings.

Table 5. 21: Strength of professional identity across work location and disciplines.

		Disciplines							
Professional Identity Scale	**Statistic/ Level**	**Nursing (n=120)**	**Occupational Therapy (n=15)**	**Psychiatry (n=47)**	**Psychology (n=16)**	**Social Work (n=17)**	**All (n=215)**	**Test**	**P-Value**
Inpatient	Mean	4.00	4.53	4.71	4.65	4.63	4.58	Type 3 Cat	**0.73**
	SD	0 (0)	0.74	0.42	0.52	0.40	0.63		
		Nursing (n=26)	**Occupational Therapy (n=9)**	**Psychiatry (n=13)**	**Psychology (n=26)**	**Social Work (n=15)**	**All (n=89)**		
Community	Mean	4.22	4.61	4.22	4.57	4.56	4.48	Type 3 Cat	**0.69**
	SD	0 (0)	0.42	0.65	1.42	0.58	0.87		
		Nursing (n=154)	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**All (N=316)**		
Combined	Mean	4.56	4.54	4.62	4.48	4.40	4.54	Type 3 Cat	**0.69**
	SD	0.69	0.55	0.79	0.86	0.93	0.75		

Notes for the analysis are in Appendix 27.

The difference in strength of PI between disciplines while in the predicted direction was not statistically significant on inpatient units, community teams or across the mental health service.

The five disciplines were ranked according to strength of professional identity on inpatient and community settings and overall. The ranks are presented in Table 5.22

Table 5. 22: Strength of professional identity ranks

PIS Rank	Inpatient	Community	All
1	Psychiatry	Occupational Therapy	Psychiatry
2	Psychology	Psychology	Nursing
3	Social Work	Social Work	Occupational Therapy
4	Occupational Therapy	Psychiatry*	Psychology
5	Nursing	Nursing*	Social Work

On inpatient units, strength of professional identity was highest in psychiatrists, followed by psychologists, social workers, occupational therapists and lowest in nurses. In the community setting, occupational therapists had the strongest professional identity, then psychologists, social workers, psychiatrists and nurses. These results were unexpected given that psychiatrists and nurses tend to have more clearly differentiated roles on community teams than the allied health disciplines.

Strength of professional identity was highest in psychiatrists and lowest in social workers.

5.8.3 Summary

Even though not statistically significant, strength of professional identity was strongest in psychiatrists, then nurses, occupational therapists, psychologists and social workers. These results confirmed previous research findings (Baldwin 2007). The results are consistent with the existence of the rigid hospital hierarchy.

5.8.4 What is the Relationship Between Strength of Professional Identity and Discipline Specific Activities?

Table 5.23 presents the strength of professional identity and time spent in discipline specific activity for each five disciplines in inpatient and community settings and overall.

Table 5. 23: Strength of professional identity and discipline specific activities

Variable	Disciplines					
	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**	**P-value**
Inpatient Average PIS	4.00	4.53	4.71	4.65	4.58	**0.73**
Time Spent DSA (%)	45.00	50.88	58.00	59.15	71.56	**0.041***
Community Average PIS	4.22	4.61	4.22	4.57	4.56	**0.69**
Time Spent DSA (%)	70.00	25.38	29.44	59.23	43.08	**0.003***
All Average PIS	4.56	4.54	4.62	4.48	4.40	**0.69**
Time Spent DSA (%)	45.78	46.20	58.69	53.07	47.19	**0.035***

The range in average strength of professional identity in the inpatient setting ranged from 4.00 for nursing to 4.71 for psychiatry, a difference of 0.71. The range in average strength of professional identity in the community setting ranged from 4.22 for nursing and psychiatry to 4.61 for occupational therapy, a difference of 0.39. The range in average strength of professional identity across the mental health service ranged from 4.40 for social work to 4.62 for psychiatry, a difference of 0.22. While the results were in the expected direction there was no statistically significant difference in strength of professional identity across disciplines in inpatient (p= 0.73) or community (p =0.69) work locations (see pp.375-377 analysis in Appendix 27).

The range in average percentage of time spent on discipline specific activity in the inpatient setting ranged from 45.00% for nursing to 71.56% for social work, a difference of 26.56%. The range in average percentage of time spent on discipline specific activity in the community setting ranged from 25.38% for occupational therapy to 70.00% for nursing, a difference of 44.62%. The range in average percentage of time spent on discipline specific activity across the mental health service ranged from 45.78% for nursing to 58.69% for psychiatry, a difference of 12.91%. There was a statistically significant difference between time spent engaged in discipline specific activity across the disciplines in inpatient (p= 0.041) and community (p=0.003) work locations (see analysis in 5.4.2). The relationship between

professional identity and time spent performing discipline specific activities is further tested in 5.13 Hypothesis 1.

While there was a significant difference between disciplines in the average time they spent on discipline-specific activities, there was no significant difference between disciplines on strength of professional identity.

5.9 Summary

Strength of professional identity was not significantly different between disciplines either on inpatient or community work locations. However, there was a statistically significant relationship between disciplinary group, time spent in discipline specific activity and work setting. Most disciplines spent more time engaged in discipline specific activity on the inpatient units.

5.10 Power

This chapter addresses subquestion 4.1 on power. Questions 4.1 and 4.2 are presented in Table 5.24. Groups that can negotiate greater power are more capable of protecting professional boundaries. The results for question 4.2 are analysed qualitatively and presented in the next chapter.

Table 5. 24: Power

Themes	**Question**	**Method**	
		Instrument	**Interview**
4. Power	4.1 What is the interaction between professional identity, discipline specific activities and power?	PIS, Q30, POWQ	Q1,4,5
	4.2 What effect does this interaction have on the provision of care to consumers of the mental health service?		Q7, 8

5.10.1 Internal Consistency of the Power Questionnaire

The Power Questionnaire (POWQ) was used to measure perceptions of self-power and other power for each discipline. The Power Questionnaire was developed by Eljiz (2009). It was adapted from the Mitchell and Agle (1994) Global Leaders 2000 Questionnaire. The Power Questionnaire consists of eleven items, on a 7-point Likert scale ranging from 1 = Strongly Disagree to 7 Strongly Agree. Table 5.25 reports on the internal consistency of the Power Questionnaire.

Table 5. 25: Internal consistency of the Power Questionnaire

Reliability Statistics			
Discipline	**Cronbach's Alpha**	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
Nursing	.916	.918	11
Occupational Therapy	.950	.953	11
Psychiatry	.963	.963	11
Psychology	.957	.959	11
Social Work	.954	.955	11

Cronbach's alpha is used to measure the internal consistency of an instrument. Internal consistency describes how closely a set of items are related and how well they measure the same construct (Orcher 2016). It is considered a measure of scale reliability. Instruments with an α coefficient between 0.65 and 0.8 are acceptable; but those with α coefficients that are less than 0.5 are usually unacceptable (Bryman 2015). The alpha coefficients for the POWQ were nursing (α = 0.92), occupational therapy (α = 0.95), psychiatry (α = 0.96), psychology (α = 0.96) and social work (α = 0.95). All the alpha coefficients for the Power questionnaire were > .90.

This indicates that the 11 items on the POWQ have relatively high internal consistency. A high α coefficient also indicates good face and construct validity. Construct validity is defined as the degree to which an instrument or test measures what it claims to be measuring (Bryman 2015). It refers to the transparency or relevance of a test as it appears to test participants. The results confirm that the POWQ is a reliable and valid measure of power.

5.10.2 The Factor Analysis of the Power Questionnaire

A factor can be defined as a latent (unmeasured) variable that expresses itself through its relationship with other measured variables (Frankfort-Nachmias & Leon-Guerrero 2017). Take for example a psychological construct like power. It would be impossible to measure power using just one variable. Power is a multifaceted and complex construct even though it represents a single concept. Hence, a scale is developed with many items, each of which measures one aspect of power. Factor loading refers to the relationship of each variable to the underlying factor (Frankfort-Nachmias & Leon-Guerrero 2017).

The Kaiser-Meyer Olkin (KMO) and Bartlett's Test measure of sampling adequacy was used to assess the suitability of the data for factor analysis. The KMO Test measures whether it is appropriate to perform a factor analysis on the data (Yong & Pearce 2013). The test measures sampling adequacy for each variable in the psychometric instrument and for the complete instrument. The KMO statistic measures the proportion of variance among variables that may be attributed to common variance. If the proportion is low, the data is suitable for factor analysis. Conversely, if the proportion is high then the data is not suitable for factor analysis. KMO values are typically between 0 and 1. As a rule, sampling is adequate when KMO values are between 0.8 and 1. KMO values that are close to 1 are also indicative of relatively compact correlations where factor analysis yields distinct and reliable factors (Yong & Pearce 2013). KMO values were nursing 0.92, occupational therapy 0.92, psychiatry 0.94, psychology 0.94 and social work 0.93.

A Bartlett's measure of $p < 0.05$ confirms that there is a significant relationship between the variables and therefore factor analysis is appropriate (Yong & Pearce 2013). The Bartlett's measure was significant for all five professional groups. Rotation is a technique used to improve the interpretability of factors. Rotation maximises the loading of each variable on one of the extracted factors whilst simultaneously minimising the loading on all other factors (Yong & Pearce 2013). Each of the extracted factors consists of variables with factor loadings greater than 0.5.

On completion of a Varimax Rotation with Kaiser Normalisation, 2 factors were extracted for nursing, occupational therapy, psychiatry, psychology and social work responses. Questions 1 to 9 on the POWQ loaded onto factor 1 and questions 10 to11 loaded onto factor 2 for all professional groups other than occupational therapy. For occupational therapy questions 7, 10 and 11 loaded onto factor 2. Table 5.26 presents the items and factors of the Power Questionnaire. Factor loadings of the Power questionnaire by discipline are presented in Appendix 28.

Table 5. 26: Power Questionnaire factors

1. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]
2. Generally, this occupational group has the ability to apply coercive force when making decisions
3. In this organisation, employees of this occupational group can influence decisions about material resource

4. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will
5. This occupational group has input when making decisions about material resources
6. This occupational group has input when making decisions about material resources
7. When making decisions about material resources, employees of this occupational group actively influence their superiors.
8. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.]
9. Generally, I interact with members of this occupational group on a professional level only
10. Generally, I interact with members of this occupational group socially [outside of work hours]
11. Generally, I choose to share my work breaks with members of this occupational group

5.10.3 What is the Interaction Between Professional Identity, Discipline Specific Activities and Power?

Table 5.27 presents how much power each disciplinary group believes it has and how much power each disciplinary group believes the other groups have.

Table 5. 27: Perceptions of power across discipline

		Disciplines Perception of Power							
Discipline	**Statistic/Level**	**Nursing (n=154)**	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**All (N=316)**	**Test**	**P-value**
Nurses	Mean	4.12	4.16	4.70	4.67	4.21	**4.32**	Type 3 Test	**0.02***
	SD	1.37	1.52	1.18	1.32	1.55	1.38		
Occupational Therapists	Mean	3.67	3.85	3.38	3.55	3.52	**3.60**	Type 3 Test	**0.66**
	SD	1.75	1.39	1.20	1.39	1.39	1.54		
Psychiatrists	Mean	4.48	4.96	4.66	5.31	4.93	**4.71**	Type 3 Test	**0.09****
	SD	2.01	1.62	1.62	1.57	1.73	1.83		
Psychologists	Mean	3.79	4.23	3.89	3.92	4.20	**3.90**	Type 3 Test	**0.61**
	SD	1.80	1.47	1.43	1.41	1.70	1.64		
Social Workers	Mean	3.67	3.79	3.80	3.69	3.67	**3.71**	Type 3 Test	**0.98**
	SD	1.83	1.31	1.52	1.33	1.48	1.63		

Notes for the analysis are in Appendix 27.

While nurses perceived they had the least amount of power, the other disciplines rated them as being second to psychiatrists in power. Occupational therapists were perceived to be the least powerful discipline overall.

Table 5.28 Ranking Disciplines by Power shows how each discipline ranked themselves and the other four disciplines on power.

Table 5. 28: Ranking disciplines by power

Power Ranking	**Disciplines**					
	Nursing (n=154)	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**Overall**
1	Psychiatry	Psychiatry	Nursing	Psychiatry	Psychiatry	Psychiatry
2	Nursing	Psychology	Psychiatry	Nursing	Nursing	Nursing
3	Psychology	Nursing	Psychology	Psychology	Psychology	Psychology
4	Social Work (Equal)	Occupational Therapy	Social Work	Social Work	Social Work	Social Work
5	Occupational Therapy (Equal)	Social Work	Occupational Therapy	Occupational Therapy	Occupational Therapy	Occupational Therapy

Overall, psychiatrists were perceived as having most power (μ= 4.71), then nurses (μ= 4.32), psychologists (μ= 3.90), social workers (μ= 3.71) and occupational therapists (μ= 3.60). These results are not surprising.

5.10.4 Summary

There was a high level of agreement between groups in terms of how much power each disciplinary group is perceived to possess. The results here confirmed the power structure of the hospital hierarchy. Psychiatrists were perceived as possessing the most power, then nurses, psychologists, social workers and last occupational therapists.

5.10.5 Activity, Professional Identity and Power

Table 5.29 provides a summary of time spent on discipline specific activity, generic activity, strength of Professional Identity and Power for the five professional groups. The relationship between these variables is presented in Table 5.30

Psychiatrists spent most time on discipline specific activity followed by psychologists, social workers, occupational therapists and nurses. Occupational therapists spent most time on generic activity followed by social workers, psychologists, nurses and psychiatrists. Psychiatrists reported highest strength of professional identity followed by nurses, occupational therapists, psychologists and social workers. Psychiatrists were perceived as the

most powerful professional group followed by nurses, psychologists, social workers and occupational therapists.

Table 5. 29: Summary of time spent on discipline specific activity, generic activity, strength of professional identity and power of the professional groups

Variable	Disciplines				
	Nursing (n=154)	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**
Mean Discipline - Specific Activity	45.78	46.20	58.69	53.07	47.19
Mean Generic Activity	36.82	49.80	26.56	38.72	40.31
Mean PIS	4.56	4.54	4.62	4.48	4.40
Mean POW	4.32	3.60	4.71	3.90	3.71

Table 5. 30: Ranking disciplines on DSA, GA, PI & POW

Category	Discipline Rankings				
	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**
Mean percentage Time on Discipline Specific Activity (DSA)	5	4	1	2	3
Mean percentage Time on Generic Activity (GA)	2	5	1	3	4
Mean Strength of Professional Identity (PI)	2	3	1	4	5
Mean Power (POW)	2	5	1	3	4

DSA, GA and POW are ranked from highest to lowest (1-5) and GA is ranked from lowest to highest (1-5).

Of note, psychiatrists spent the most time on average in discipline specific activity, the least time on generic activity, reported the strongest sense of professional identity and were perceived to be the most powerful professional group in the mental health service.

A summary of key results from this section is presented in Table 5.31 below; see Appendix 27 (Tables 31-37) for the full analysis and explanation.

Table 5. 31: Summary of key results to sub-question 4.1- Power

Description of Analysis and Associated Table	Key Finding
Perceptions of power across disciplines were compared (see Appendix 27 for analysis).	While nurses perceived they had the least amount of power, the other disciplines rated them as being second to psychiatrists in power. Occupational therapists were perceived to be the least powerful discipline overall.
Self-perception of power for nurses was compared to other perception of power (see Appendix 27 for analysis).	There was a significant difference in the self-perception of power between nurses and other disciplines. Nurses perceived themselves as having little power.
Self-perception of power for occupational therapists was compared to perception of power by other disciplines (see Appendix 27 for analysis).	There was no significant difference between disciplines in terms of their perception of how much power occupational therapists possessed.
Self-perception of power for nurses was compared to perception of power by other disciplines (see Appendix 27 for analysis).	There was no significant difference between disciplines in terms of their perception of how much power psychiatrists possessed.
Self-perception of power for nurses was compared to perception of power by other disciplines (see Appendix 27 for analysis).	There was no significant difference between disciplines in their perception of how much power psychologists possessed.
Self-perception of power for nurses was compared to perception of power by other disciplines (see Appendix 27 for analysis).	There was no significant difference between disciplines in their perception of social workers power.
The relationships between discipline specific activities, strength of professional identity and power (Table 32).	Both strength of professional identity and power increased when clinicians spent more time performing discipline specific activities. There was a positive relationship between strength of professional identity and power.
The relationships between discipline specific activities, strength of professional identity and power for nurses (Table 33).	For nurses there was no significant relationship between DSA and strength of professional identity. However, there was a positive relationship between DSA and power as well as strength of professional identity and power.
The relationships between discipline specific activities, strength of professional identity and power for occupational therapists were tested (Table 34).	For occupational therapists, there was no significant relationship between DSA and strength of professional identity. There was a positive relationship between DSA and power. However, there was no statistically significant relationship between strength of professional identity and power.
The relationships between discipline specific activities, strength of professional identity and power for psychiatrists were tested (Table 35).	For psychiatrists, there was a significant relationship between DSA and strength of professional identity, between DSA and power as well as strength of professional identity and power.
The relationships between discipline specific activities, strength of professional	For psychologists there was no significant relationship between DSA and strength of professional identity.

Description of Analysis and Associated Table	Key Finding
identity and power for psychologists were tested (Table 36).	However, there was a positive relationship between DSA and power as well as strength of professional identity and power.
The relationships between discipline specific activities, strength of professional identity and power for social workers were tested (Table 37).	For social workers there was a significant relationship between DSA and strength of professional identity, between DSA and power as well as strength of professional identity and power.

5.11 Summary

The results indicate that, in general, as professional groups increase the time they spend performing discipline specific activities, there will be corresponding increases in strength of professional identity and power. Similarly, the results show that powerful occupational groups have a strong professional identity.

5.12 Hypothesis Testing

Three hypotheses were tested. The hypotheses are in Table 5.32

Table 5. 32: Hypotheses

Hypothesis	Method
1. Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.	Correlation between PIS and Q30 scores
2. Strength of professional identity will have a positive relationship with power.	Correlation between PIS and POWQ scores
3. There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.	Paired T-test between PIS Inpatient and PIS Community for overall sample and between groups.

5.13 Hypothesis 1

The first hypothesis was strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.

The summary of key results is presented in Table 5.33 below; see Appendix 27 for the full analysis and explanation.

Table 5. 33: Hypothesis 1 results

Hypothesis	Focus	Key finding
Hypothesis 1	Professional Identity (PIS) and Discipline Specific Activities (DSA) – Overall (Table 38).	There was a positive relationship between time spent on discipline specific activities and strength of professional identity.
	The relationship between strength of professional identity and time spent on discipline specific activities for nurses (Table 39).	There was no relationship between time spent on discipline specific activities and strength of professional identity for nurses.
	The relationship between strength of professional identity and time spent on discipline specific activities for occupational therapists (Table 40).	There was no relationship between time spent on discipline specific activities and strength of professional identity for occupational therapists.
	The relationship between strength of professional identity and time spent on discipline specific activities for psychiatrists (Table 41).	There was a positive relationship between time spent on discipline specific activities and strength of professional identity for psychiatrists.
	The relationship between strength of professional identity and time spent on discipline specific activities for psychologists (Table 42).	There was no relationship between time spent on discipline specific activities and strength of professional identity for psychologists.
	The relationship between strength of professional identity and time spent on discipline specific activities for social workers (Table 43).	There was a positive relationship between time spent on discipline specific activities and strength of professional identity for social workers.

5.14 Hypothesis 2

The second hypothesis was strength of professional identity will have a positive relationship with power.

The summary of key results is presented in Table 5.34 below; see Appendix 27 for the full analysis and explanation.

Table 5. 34: Hypothesis 2 results

Hypothesis	Focus	Key finding
Hypothesis 2	Professional Identity (PIS) and Power – Overall (Table 44).	There was a positive relationship between strength of professional identity and power.
	The relationship between strength of professional identity and power for nurses (Table 45).	There was a positive relationship between strength of professional

		identity and power for nurses.
	The relationship between strength of professional identity and power for occupational therapists (Table 46).	There was no relationship between strength of professional identity and power for occupational therapists.
	The relationship between strength of professional identity and power for psychiatrists (Table 47).	There was a positive relationship between strength of professional identity and power for psychiatrists.
	The relationship between strength of professional identity and power for psychologists (Table 48).	There was a positive relationship between strength of professional identity and power for psychologists.
	The relationship between strength of professional identity and power for social workers (Table 49).	There was a positive relationship between strength of professional identity and power for social workers.

5.15 Hypothesis 3

The third hypothesis tested was there would be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

The summary of key results is presented in Table 5.35 below; see Appendix 27 for the full analysis and explanation. A summary of all the hypotheses tested is in Appendix 29.

Table 5. 35: Hypothesis 3 results

Hypothesis	Focus	Key finding
Hypothesis 3	Difference in strength of professional identity and power between inpatient and community staff – overall (Table 50).	There was no significant difference in strength of professional identity or power between all inpatient and community staff.
	Difference in strength of professional identity and power between inpatient and community nursing (Table 51).	There was no significant difference in strength of professional identity or power between inpatient and community nurses.
	Difference in strength of professional identity and power between inpatient and community occupational therapists (Table 52).	There was no significant difference in strength of professional identity or power between inpatient and community occupational therapists.
	Difference in strength of professional identity and power between inpatient and community psychiatrists (Table	There was no significant difference in strength of professional identity or power

	53).	between inpatient and community psychiatrists.
	Difference in strength of professional identity and power between inpatient and community psychologists (Table 54).	There was a significant difference in strength of professional identity but not power between inpatient and community psychologists.
	Difference in strength of professional identity and power between inpatient and community social workers (Table 55).	There was no significant difference in strength of professional identity or power between inpatient and community social workers.

5.16 Summary

Overall, as time spent performing discipline specific activities increased so did strength of professional identity. Increases in strength of professional identity were associated with corresponding increases in power. However, there was no statistically significant difference in strength of professional identity or power between inpatient or community staff. The only statistically significant difference was in strength of professional identity between inpatient ($\mu = 22.22$) and community psychologists ($\mu = 46.32$).

The next chapter presents the results of the semi-structured interviews that explored the mental health clinicians' views on the activities they perform, their roles, the skills required to meet consumer needs, the relationships between professional groups, power and whether the mental health service is meeting all consumer needs.

6. An Exploration of Staff Views: Activities, Roles, Power Relationships and the Needs of Consumers

6.1 Introduction

This sixth chapter now reports staff views about their activities, roles, power relationships and the needs of consumers. This chapter presents this information in five sections, according to the themes derived from the analysis. First, the activities staff perform are detailed; second, staff roles are explained; third, staff understanding of the role of other professions is examined; fourth, power relationships between the professional groups are investigated; and, fifth, staff perceptions as to whether the mental health service is meeting the needs of consumers are noted.

As detailed in the Methods Chapter, 20 semi-structured interviews were completed with clinicians from the SLHD mental health service. There were 10 clinicians from both the inpatient units and community teams. Both the inpatient group and community group of participants included two professionals from nursing, occupational therapy, psychiatry, psychology and social work. Participants were interviewed with a semi-structured interview that was comprised of eight questions. Table 6.1 presents a summary of how the interview questions addressed the eight research sub-questions.

Table 6. 1: Research sub-questions and relationship to the interview questions

Themes	**Research sub-questions**	**Method**		
		Instrument	**Interview**	**Questions**
Activities	1.1 What activities are performed by the five disciplines in the mental health service?	MHAC, Q32	Q 1, 2, 3	1. Can you tell me a little bit about your role? 2. Have a look at the list of the top 5-10 skills/competencies within your own profession. These are skills identified as being specific to your profession based on the survey questionnaire we undertook with mental health. Do you agree, disagree, or want to add anything else to that list? 3. Now, take a look at the top 5-10 skills/competencies for the other the other disciplines. What do you think? Is there anything there that surprises you? Why?

Themes	Research sub-questions	Method		
		Instrument	Interview	Questions
	1.2 How much time is spent by each discipline on performing these activities?	Q30, 31		
Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?	MHAC	Q2,3,4,5	2. Have a look at the list of the top 5-10 skills/competencies within your own profession. These are skills identified as being specific to your profession based on the survey questionnaire we undertook with mental health. Do you agree, disagree, or want to add anything else to that list? 3. Now, take a look at the top 5-10 skills/competencies for the other the other disciplines. What do you think? Is there anything there that surprises you? Why? 4. Which professional group do you see as the most similar to you and why? 5. Which do you see as least similar to you and why?
	2.2 Who does each discipline believe should perform these activities?	MHAC	Q2,3,4,5	
Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	PIS		
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	PIS, Q30		
Power	4.1 What is the interaction between discipline, professional	PIS, Q30, PQ	Q1,4,5	1. Can you tell me a little bit about your role? 4. Which professional group do you see as the most similar to you and

Themes	Research sub-questions	Method		
		Instrument	Interview	Questions
	identity, discipline specific activities and power?			why? 5. Which do you see as least similar to you and why?
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?		Q6, 7, 8	6. Going into the future, how can we achieve better role clarity between professions in allied health? 7. What do you think about the ways we are currently addressing the needs of consumers of mental health services? 8. How do you think professional groups in allied health should develop their skills in the future to meet the needs of consumers of mental health?

As explained in the Methods Chapter, the interviews were recorded, transcribed and then coded. Thematic content analysis of the recorded interviews involved six steps as detailed in the methodology chapter, in section 4.8 (Thomas & Harden 2008). The researcher abstracted 25 codes from the interview transcripts. The meaning of each code was defined in the context of the interviews (see Appendix 30). The codes were analysed and categorised in two ways, deductively and inductively, with the results combined to produce a findings matrix (Table 6.2). The strength of the analysis in these two ways is what allowed detailed consideration of the findings and representation of issues in multiple ways.

Deductively, the codes were grouped into six descriptive themes that mapped onto the four theories: tribal theory; role theory; professional identity theory; power; and two categories, discipline specific skills and consumer needs. The descriptive themes are discussed further in chapter 7.

Inductively, the codes were organised into analytical themes. Four analytical themes were extracted. The first theme is activities, which covers what "we do", and what similarities and differences there are between what "we do". The second theme is role, which covers role conflict and the impact of horizontal substitution on the disciplinary groups. The third theme is leadership, which covers power and authority and how this affects relationships and

negotiations between the disciplinary groups. The fourth theme is consumer needs, which covers "what we do now" and "what we need to do in the future" to meet the full range of needs of consumers of the public mental health service.

Table 6. 2: Descriptive and analytical themes

Analytical Themes	**Codes**	**Descriptive Themes/Theories**					
		Tribal	**Role**	**PI**	**DS**	**Power**	**Consumer Needs**
Activities	Clinical Activities	x	x				
	Discipline Specific Activities	x	x	x	x	x	
	Professional Identity Displayed through Actions	x		x	x		
	Least Similar	x	x				
	Multidisciplinary	x					
	Non-Clinical Activities	x					
	Generic Activities and Crossover	x					
	A Task Oriented Focus		x				
	Similarities between Professional Groups			x			
Role	Role Differentiation	x	x	x	x	x	x
	Tasks Not Intervention Focused		x		x		x
	Role Clarity and Understanding the Role of Other Disciplines			x	x		x
	Blurred Boundaries		x	x		x	
	Individual Professional Characteristics contributing to Blurred Boundaries			x	x	x	x
	Questioning if the Arrangements Represented the Best use of Skills				x		x
Leadership	Leadership				x	x	
	Authority				x	x	
	Power – Individual and Collective				x	x	
	Competition for Power					x	
	Management					x	
	Resourcing				x		x
Consumer Needs	Basic Consumer Needs are only being Met				x		x
	Consumer Needs Unmet				x		x
	Future Need and What Needs to Change				x		x
	Supporting Staff and Skill Development		x		x		

The interviews were used to build on outcomes of the quantitative data. Analysis of the interviews used a combination of both inductive and deductive approaches or according to Blaikie (2010) – an abductive approach. An abductive approach permits iterations between theory and practice to achieve sense making, that is: "Every day concepts and meanings provide the basis for social action, interaction about which social actors can give accounts from which social scientific description can be made from which social theories can be generated or which can be understood in terms of existing social theories and perspectives" (Blaikie 2007, p.90). A central feature of abductive analysis is that it is iterative and creative and involves the researcher alternating between immersion with the data and analysis of it. Certainly, this was experience of the researcher during the interviews.

6.2 Theme One – Activities

The first theme is activities, which covers what "we do", and what similarities and differences there are between what "we do." Nine of the codes were grouped under the theme activities. Participants were asked to describe their contribution and what activities they performed in attempting to meet the needs of consumers of the mental health service. They were also asked to share their views about the activities their discipline performed and the activities performed by the other disciplines. The structure of this sub-section is as follows: first, clinical activities, second discipline specific activities, third professional identity displayed by actions, fourth differences between the professional groups, fifth multidisciplinary work, sixth non-clinical activities, seventh, generic activities, eighth, a task-oriented focus and ninth similarities between the professional groups. The sub-themes relate to similarities and differences experienced by clinicians in both inpatient and community contexts.

6.2.1 Clinical Activities

Participants, from the different clinical groups, identified clinical activities – appropriate for their profession - as core, daily, and ongoing tasks. These activities, such as physical and social needs assessments, were performed routinely in both inpatient and community contexts. For example:

> *I …try and make sure that they've got the appropriate supports depending on their level of need. So that's going to encompass referrals to a number of NGOs, mental health support services…to accommodation, depending on their needs… (Inpatient 1-Social Worker- I17).*

I'm a psychiatrist working in the forensic area and what I do is the day-to-day management of people with a mental illness who come in contact with the legal system… with my patients I… do risk assessments and manage their transition… out into the community. I do a lot of report writing as part of this… I also work with a multidisciplinary team as part of this process and have regular meetings with them and team discussions about the patient…and what treatment they need. (Inpatient 2-Psychiatrist-I2).

I do assessments, daily living skills work, anything from budgeting to buying groceries, organising shopping, cooking, travelling and vocational activities as well… I focus on how the individual functions daily. (Inpatient 3-Occupational Therapist-I15).

Both inpatient and community clinicians reported they routinely performed assessments, made referrals to other services, discussed consumer care with colleagues and attempted to provide clinical services that addressed the physical and social needs of consumers. Many of these clinical activities were performed by all disciplines. For example:

I do physical assessments. Mainly mental states, because whether you work in acute care or you are case managing, you're constantly doing mental states every day. That's your bread and butter. (Community 1-Nurse-I10).

I do everything from medication supervision or medication management, dealing with Centrelink, dealing with Trustee & Guardian applications, financial management orders, community treatment orders…Ah, what else do we do? Mental state assessments, we do those on a daily basis… consumer visits… It really depends on what the consumers need… What else do I do...psychological interventions… depending on the consumers' needs… (Community 2-Psychologist –I8).

6.2.2 Discipline Specific Activities

Across the five professional groups, most participants could identify certain activities that belonged to a particular discipline. They were able to recognise that while there was crossover in many activities, these discipline specific skills were also required for consumer care. For example:

There's… a group of skills that have crossed over between the different disciplines, but there's… particular skills that are specific to that discipline…occupational therapy, living skills assessments… for psychology, psychological therapies and cognitive assessments, using assessment tools is definitely a specialist skill for psychologists… in social work negotiating medico-legal aspects of care and housing… administering medication and providing one-to-one nursing care…They're the key tasks for nursing. (Inpatient 1-Psychiatrist-I1).

We have clinicians who have…specific skills… who studied these specific interventions in order to be able to work together as a team and to be able to contribute as a team to a person's care." (Community 1-Psychologist-I16).

6.2.3 Professional Identity Displayed through Actions

Crossover in activities between disciplines had an impact on their sense of professional identity. Many participants struggled to explain what they did and how to differentiate their discipline from the other disciplines in the mental health service. In particular, nurses, occupational therapists and social workers expressed concern about the impact of too much crossover on their sense of professional identity.

Nurses struggled to explain their unique role in the delivery of mental healthcare and believed the other professional groups were better at defining their professional role. For example:

I think nurses really stink at and we're getting worse, at articulating what we do in mental health… I'm quite concerned about nursing role identity…I'm not sure a lot of mental health nurses these days know what their role is and I think that's where people struggle. Like if you're a psychologist of course it's okay to document you engaged therapeutically with someone because that is what your role is…and it's very clearly defined and established… I think maybe we could learn from the other disciplines about claiming… our role as important. Not that I think they do it brilliantly well but I think most disciplines do it better than nursing. (Inpatient 1-Nurse-I20).

… we can do a psychological assessment, groups, counselling… but we can also do medication monitoring…we can do much more than give injections… (Community 1-Nurse-I7).

Occupational therapists were concerned that the other clinical groups did not understand what they did. This view arose because they themselves could not articulate their role clearly or differentiate their role from the other allied health groups. This is illustrated by the following statements:

On inpatient units, OTs and social workers are the main allied health staff… they cover each other…so our roles get confused… (Inpatient 2-Occupational Therapist-I12).

To this day. I still struggle to explain what an OT is to someone and that… that is something we have struggled with for decades in the profession because it's [the role] is so varied. (Community 2-Occupational Therapist-I11).

Similarly, social workers reported they were often treated like welfare workers because they took on such a diverse range of activities, as well as the values of other professional groups. This behaviour resulted in a lack of role clarity and concerns about professional identity as demonstrated by the following statements:

> *…the most difficulty I have in defining what the role of a social worker is… is with psychiatry and nursing… Because we do everything …They're the ones that seem to be a bit confused as to exactly what the role of a social worker is and I would suspect that they probably have issues with psychology and OT's as well, trying to work out what everybody's roles are. (Inpatient 3-Social Worker-I4).*

> *I know some social workers who may identify more as a psychologist which I don't think is a healthy thing. Some social workers in a multidisciplinary team sometimes take on the values of other professions and they operate as if they are from that profession. (Community 3-Social Worker-I5).*

Other disciplines also reported difficulty in understanding the roles and boundaries of the social work role. For example:

> *Social workers kind of do everything… there is so much blurring… (Inpatient 4 Psychologist-I14).*

> *I think social workers struggle a little bit to explain what they do because they do get classified as a welfare officer. (Community 4-Occupational Therapist-I11).*

> *One of the professions that have rather blurred their lines because they've just gone and ended up doing a lot more [than their role] is probably social workers. (Community 5-Nurse-I7).*

6.2.4 Least Similar

Less crossover of activities occurred between disciplines that saw themselves as least similar. The focus and model of care determined whether each professional group perceived itself to be similar or different to the other professional groups.

Nurses saw themselves least like psychologists and psychiatrists. Nurses reported they focused on the physical aspects of care whereas psychologists focused on the psychological aspects of care and psychiatrists on diagnosis and symptom management. In the words of the participants:

Look probably psychiatry. I don't necessarily have the same goals as what a psychiatrist might have. I don't care about diagnosis… I think medication is one part of treating what we treat but I don't think it's the only thing… (Inpatient 1-Nurse-I20).

Psychologists that I've had dealings with are very, very reluctant to get their hands dirty. Yeah it's like there's blinkers and they don't see the physical. They are the polar opposite to nurses… Psychologists deal with the brain, chop the person's head off… It's … CBT, DBT and that sort of stuff that as a nurse I don't do. (Community 1-Nurse-I10).

Similarly, occupational therapists also saw themselves least like psychiatrists. Occupational therapists reported their focus was on the recovery model with its emphasis on strengths and functioning. They reported this was at odds with psychiatrists who worked under the medical model that emphasises symptom management. The difference in their approach was explained in this way:

Least like OT I would say psychiatry. The reasons for that I think are… just different treatment goals and different treatment models, yeah, the models… The medical model as opposed to the recovery model. (Inpatient 2-Occupational Therapist-I12).

Psychiatrists…they focus on diagnosis and symptoms… we focus on functioning in the community (Community 2-Occupational Therapist-I9).

Psychiatrists saw themselves least like nurses and occupational therapists. Psychiatrists saw nurses and occupational therapists as being involved in the physical care of consumers while their role was the psychiatric and psychological care of consumers. The psychiatrists put their views as follows:

I think psychiatry and psychology are similar in that they're not providing physical care as much as… nursing…nursing definitely provides a lot of one-on-one physical care, particularly with things like assisting consumers, washing clothes, supervising bathing, um, supervising meals. They're some big differences from psychiatry. (Inpatient 3-Psychiatrist-I1).

I would say occupational therapy. OT's have a very specific role… Their focus is less on the psychological aspects of a patient's presentation and more around their functional…physical and ADL's … (Community 3-Psychiatrist-I19).

Psychologists saw themselves least like nurses. Similar to the psychiatrists they saw nurses as being involved in the physical care of consumers while psychologists focused on the psychological care of consumers. Again, in their words:

> *Nursing …it's the models of care in nursing… more functional… looking after the function of the person, stabilisation, physical care… whereas psychology is more assessment, psychotherapy and then referrals. (Inpatient 4-Psychologist-I14).*

> *Least like psychology… mainly nursing. I see nurses as having a lot of physical health skills and having a lot of knowledge around physical health and I see myself as having none. I see [psychologists] as having a lot of therapeutic skills and that's less common in nursing. (Community 4-Psychologist-I16).*

Social workers saw themselves least like psychiatrists. They believed the medical model was at odds with strengths based and social justice models of care, as demonstrated below:

> *Probably psychiatry I think… there are often differences in clinical opinion, there are competing or differing professional perspectives, so for example, the social model of disability versus the medical model of disability and that can clash… there are so many instances of the social consequences of mental illness such as family breakdown, separation, homelessness, which aren't given so much emphasis or weight in an inpatient unit, whereas for social workers that's their bread and butter… Addressing that is just as important as addressing or treating the symptoms of mental illness, which is what psychiatrists are good at doing, but social workers want to and should address the root causes of some of these inequities and social justice factors leading to their admission. (Inpatient 5-Social Worker-I4).*

> *With psychiatrists, there is often a difference in clinical opinion; there are competing or differing professional perspectives, so for example the social justice models versus the medical model and that can clash. I've seen many instances of those ideals, and values clash. (Community 5-Social Worker-I3).*

6.2.5 Multidisciplinary

Most participants believed a multidisciplinary approach was required to meet the needs of consumers. They recognised that a combination of skills and opinions from each discipline was required in providing quality care. The participants stated the point in this way:

> *I think throughout the management there's lots of small decisions people make day to day without even having to negotiate or discuss with a psychiatrist and there's also some*

decisions people are in a better position to make because of their own area of expertise but major decisions need to be made in a collaborative way as well. (Inpatient 1-Psychiatrist-I2).

Participants reported that effective multidisciplinary consumer care required a collaborative and integrated approach. For example:

I think one of the major things is multidisciplinary working… liaising with the treating team and putting forward our findings and integrating them into the recommendations and treatment plan. (Inpatient 2-Psychologist-I18).

If we are working in a multidisciplinary team, we need space for all rather than one to be in a hierarchy over the others. (Community 1-Social Worker-I5).

6.2.6 Non-Clinical Activities

The majority of participants expressed some level of frustration with the amount of time spent engaged in non-clinical (non-therapeutic) generic activities. This frustration was demonstrated in statements such as these:

At the moment I am somewhat bogged down by admin and other tasks, the responsibilities for clinicians have increased substantially and by responsibilities, I mean… tasks, allocated tasks, monitoring, administration, recording stats… I think this has increased a lot over the last couple of years. (Inpatient 1-Social Worker-I4).

We don't look like a very therapeutic bunch… it's all task based and observable stuff…ADLs, medication… it's almost like a combat mentality. We sort of just patch them up and get them out. (Inpatient 2-Nurse-I20).

We are completely swamped with lots and lots of case management activities… (Community 1- Psychologist-I16).

Participants recognised the need for completing these activities but they were concerned that the time spent engaged in non-clinical activities was increasing. This increase served to decrease the amount of time they could provide therapeutic interventions. They reported the challenge as follows:

You know I guess what this will tell us is that across all areas, people are very focussed or maybe bogged down with very specific tasks and a lot of the therapy doesn't get done, it gets left out. (Inpatient 3-Psychiatrist-I2).

We concentrate on tasks, forms… medication, CTOs…lots of generic tasks…we need to do them …the purpose of care coordination is to meet those needs but…I think everyone in the community would benefit from psychological interventions… from having an OT assessment…family therapy… (Community 2-Psychologist-I8).

6.2.7 Generic Activities and Crossover

Participants reported that there was significant crossover in tasks between disciplines. This crossover in activities was largely due to models of care, team structures and resourcing. Crossover in activities was experienced by clinicians in both inpatient and community contexts. For example:

I think normally there is a lot of crossover…disciplines don't strategically say this is my job, that's your job…there is crossover where people help out with tasks and um maybe do tasks that don't technically fall into their discipline, but they do them anyway.(Inpatient 1-Psychiatrist-I1).

There's a lot of crossover between social workers, OTs and nurses on the wards. Not all wards have designated psychologists… (Inpatient 2-Social Worker-I17).

You know irrespective of what discipline you belong to… you spend, I don't know x amount of time weekly doing the top 3 things that you would do under your discipline, but the bulk of the time you spend doing things that are required. (Community 1-Nurse-I7).

Clinicians also reported that the pressure to perform generic activities eroded the time available for performing discipline specific activities. For example:

We have all these sort of generic activities that the disciplines are doing in the community that take up quite a bit of time, it doesn't leave a lot of time to do some of the long-term work that's discipline specific, some of the skill building, some of the other interventions that the disciplines have skills in that could be of benefit to consumers but there isn't the opportunity to do that. (Community 2-Occupational Therapist-I9).

6.2.8 A Task-Oriented Focus

Clinicians described the majority of activities they performed as task oriented, hands-on and focused on basic physical and social needs. A focus on these activities meant participants did not have time available to use some of their discipline specific skills in providing consumer care. For example:

I think nurses seem to struggle to articulate, well actually I did spend some one to one time with this person, I did do some relaxation with them, instead they will go I did this task… we checked the blood pressure or they ate this much… it's very physical, task based and observable… it's like a combat mentality. We somewhat just patch them up and get them out. Cause we have ten more waiting at the door. (Inpatient 1-Nurse-I20).

Participants were concerned that by focusing on physical care, there was little time left for other therapeutic interventions. This created tension between what they did and what they felt they should do for consumers. This tension is outlined in the examples below::

The social work role is so task orientated…but the social work role should be more clinical… more therapeutic than task orientated. (Community 1-Social Worker-I5).

Rather than being so task focused we need to be a little bit more holistic in our approach… Get to know the person… offer proper treatments…not just medication… (Community 2-Psychiatrist-I6).

Participants reported that the emphasis on *hands on* activities resulted in clinicians being unable to provide adequate psychosocial and psychotherapeutic interventions. This challenge was demonstrated by the following statements:

We are just task focused … psychotherapeutics – nothing there… it's all very task, task focused. (Inpatient 2-Nurse-I20).

It's hands on… like social workers will help consumers fill out forms and do… all those things, OTs will assist washing clothes or supervised bathing and things like that… it's functional, like nursing is functional. (Inpatient 3-Psychologist-I14).

The focus is less on the psychological aspects of a patients' presentation and more about their functional and physical needs. (Community 3- Psychiatrist-I19).

The physical care requirement created frustration for participants who were concerned that consumer needs were not being met. Participants reported that many of the activities they performed in mental health services, whether inpatient or community based, were coercive in nature because they were working with reluctant consumers. For example:

I think it becomes tricky… in that you have more restrictive practices and structures [in mental health]… restrictive practice is the first port of call as opposed to looking at other ways to work with somebody, like a bit more therapy. (Inpatient 4-Occupational Therapist-I15).

We tend to take a paternalistic view… we work under the Mental Health Act… I think you have to accurately define who and what we can effectively treat. We have to then decide what to do with those people we cannot treat… instead of keeping them in hospital. (Community 4-Psychiatrist-I6).

6.2.9 Similarities between Professional Groups

More crossover of activities occurred between professional groups that saw themselves as being alike in terms of their underlying philosophies, focus and models of care. Crossover of activities occurred in both community and inpatient contexts.

Crossover of activities on inpatient units was greatest between nurses, occupational therapists and social workers. Nurses perceived themselves as most similar to occupational therapists because both disciplines had a practical, hands-on approach to consumer care. They described their experience in this way:

…there's a fair bit of cross over or overlap in terms of the activities that would be performed by OT's and nurses… I think the only difference would be administration of medication… occupational therapy used to be a nursing role. (Inpatient 1-Nurse-I13).

I'm going to say occupational therapy. Mainly because the model of care tends to look at task based and physical care activities of daily living. They're a bit more practical… not therapy based. (Community 1-Nurse-I10).

Occupational therapists likewise saw themselves as most similar to nurses and social workers, again because their focus was on individual functioning and practical skills. In their words, they explained:

I think social work and nursing… I think because probably social work covers a lot of the areas of function that an OT looks at… nursing because we do practical, physical things… OT is a bit of a communal profession. (Inpatient 2-Occupational Therapist-I15).

I think there are individuals with whom OT might have more affinity with and that would be individuals who are perhaps more practical and hands on like social work or nursing. (Community 2-Occupational Therapist-I11).

Psychiatrists saw themselves as most similar to psychologists. They believed they were similar in terms of their training and focus on psychological therapy. For example:

Psychology would be the most similar in terms of the provision of psychological therapy… psychiatry should be doing more in the psychological therapies. Psychologists have to

demonstrate CPD similar to psychiatrists and we have similar formal training structures. (Inpatient 3-Psychiatrist- I1).

Psychologists would sit very close to psychiatrists… training, evidence and knowledge… psychiatrists and psychologists have more of an understanding of mental health, not just the psychological but the biological aspects as well and can think of patients in the more holistic picture. (Community 3-Psychiatrist-I19).

Psychologists saw themselves as most similar to psychiatrists. Like psychiatrists, they believed the similarities were in their training, approach to assessment and focus on psychological therapy. They reported their views in these words:

Our level of training, the way our training is conducted, the sort of models we have requiring a certain amount of independence and autonomy… post graduate training, equates more with how psychiatrists are trained than perhaps with social work and occupational therapy. (Inpatient 4-Psychologist-I14).

Psychiatry, in the sense of assessments… very similar models for assessment perhaps and the psychotherapeutic interventions…. psychological interventions predominantly. (Community 4-Psychologist-I8).

Social workers saw themselves as most similar to occupational therapists in terms of the physical activities they performed, and most like psychologists in terms of the psychosocial and psychological interventions they performed. They stated the following:

Occupational therapy within an inpatient setting and then probably psychology…. I think that similarity is even closer between OT and social work on longer stay units like Kirkbride and Broughton where the goals and activities… are very similar and there is less of a differentiation between the two disciplines (Inpatient 5-Social Worker-I17).

I would have to say occupational therapists…we work quite closely together when it comes to function and support needs in the community… and also psychologists in terms of counselling and DBT groups." (Community 5-Social Worker-I5)

6.2.10 Summary

In summary, the activities performed by all professional groups in the mental health service consisted of clinical and non-clinical activities that could be discipline specific or generic in nature. Participants agreed that a multidisciplinary approach and a combination of both discipline-specific and generic activities were required to meet the needs of consumers.

However, they were concerned that the emphasis was increasingly on generic, physical care that was task-focused, hands-on and coercive. The emphasis on generic activities resulted in horizontal substitution. Horizontal substitution was more likely to occur between nurses, occupational therapists and social workers, who had a similar focus and models of care. Crossover in tasks resulted in concerns about, role blurring, professional identity and tension between the professional groups. Participants were also concerned that consumer needs in psychological and psychosocial interventions were not being met. Participants reported that too much crossover in activities between nursing, occupational therapy, psychology and social work resulted in a lack of role clarity. Role and role clarity is discussed in the next section.

6.3 Theme Two – Role

The second of the four themes is role, which covers role conflict and the impact of horizontal substitution on the disciplinary groups. Six of the codes were grouped under role. Participants were asked to describe their role in the mental health service. They were asked to describe which discipline they saw as most similar to their own and which discipline they saw as least similar to their own and discuss why. Participants were also asked to comment on the top five to ten competencies identified by everyone as being specific to each discipline. They were asked whether they agreed, disagreed or were surprised by the lists. The structure of this sub-section is as follows: first role differentiation; second what is missing from the top ten skills of each discipline; third lack of role clarity and understanding of each disciplines role; fourth, the impact of blurred boundaries; fifth, individual professional characteristics contributing to blurred boundaries; and sixth, questioning if the arrangements represented the best use of skills.

6.3.1 Role Differentiation

When asked to discuss their role in the mental health service, most participants described the differences in role not in relation to other professions, but between their own professional colleagues working on inpatient and community teams. Participants reported there was more role differentiation on inpatient units than on community teams. For example:

> *I think there's definitely a clearer role allocated to nursing staff on an inpatient unit versus the occupational therapist versus the psychologist versus the social worker. (Inpatient 1-Psychiatrist -I1).*

I think compared to community... inpatient services are doing better in terms of understanding each other's roles. (Inpatient 2-Occupational Therapist-I12).

Would it be hard to differentiate a social worker from a psychologist from an OT, from a nurse in the community? Good question… Yes…but probably not so much nursing because nursing have a very distinct skill, you know, they are the only discipline who can provide injections or dispense medication. (Community 1-Psychologist-I8).

We have all these sort of generic activities that the disciplines are doing in the community that take up quite a bit of time, it doesn't leave a lot of time to do some of the long-term work that's discipline specific… It's different on inpatient teams… (Community 2-Occupational Therapist-I9).

The differentiation between professional colleagues in different service locations – either community or inpatient teams – raised an unexpected conflict. There was the possibility that there could be, at times, more perceived similarity with other professions than with one's own profession.

6.3.2 Tasks not Intervention Focused

Participants were asked to comment on the top 10 activities for their own discipline and the top 10 activities for other disciplines. In responding, a significant issue raised by the majority of participants was surprise at how task focused they were. They stated the following:

What is missing is care planning at the top of this list… it's not all about medication prescribing … it's the planning or discharge or care planning for the person that's a big part of the psychiatrists' role. (Inpatient 1- Psychiatrist-I1).

It's offensive that my main activity [neurocognitive assessment] isn't even on that list…it's all day-to-day [generic] stuff. (Inpatient 2-Psychologist-I18).

Participants' surprise was combined with concern. They noted that psychotherapeutic activities, such as psychosocial and psychological interventions, were missing for the top ten activities performed by all clinicians. For example:

We don't look like a very therapeutic bunch… it's all task based and observable stuff… ADLs, medication… it's almost like a combat mentality. We sort of just patch up and get them out. (Inpatient 3-Nurse-I20).

There's nothing there about comprehensive care reviews, purposeful activity scheduling, goal-setting, sensory interventions, psychoeducation, facilitating groups, ADLs or

psychosocial interventions… it's all task oriented. (Community 1-Occupational Therapist - I11).

There is nothing about interpersonal or micro counselling skills or communication. (Community 2-Nurse-I7).

The participants realised, on reflection of evidence presented to them, the primary focus of their work, whether they were in inpatient or community based services, was practical tasks for consumers. Unexpectedly, their perceived identity as "therapeutic clinicians" was at odds with the reality of their daily work tasks.

6.3.3 Role Clarity and Understanding the Role of Other Disciplines

Most participants recognised the lack of role clarity caused confusion and potential for conflict between disciplines. They reported that greater role clarity was required between the professional groups in the mental health service. The views on these issues were explained in this way:

I think there is a lot of crossover …people help out with tasks that don't technically fall into their discipline, but they do them anyway …so roles get confused. (Inpatient 1-Psychiatrist-I1).

There's so much blurring of roles… we need to clarify roles in a way that people don't feel that their turf is being threatened. (Community 1-Psychologist-I16).

Participants expressed frustration that others only saw the activity and did not understand the skill set required to perform the activity. Regardless of the task - such as undertaking a cooking assessment, liaising with external providers regarding finances or negotiating appropriate accommodation needs - the skills and knowledge required were often minimised or dismissed. For example:

We have our job title …and although there is some stereotyped stuff about how that's a social worker job, cooking is an OT job… people may wonder why cooking is OT, housing is social work… they don't really understand what skill base or knowledge base they need to do the cooking assessment or the housing liaison. That is the thing we need to improve. (Inpatient 2-Occupational Therapist- I12).

Social work isn't just filling forms… driving people around, packing belongings and Centrelink…we have skills in assessment, counselling, monitoring risk before we take consumers out… it's frustrating. (Community 2-Social Worker-I5).

Participants reported their perception that the majority of mental health service clinicians had a superficial understanding of the role of each professional group. Participants were surprised at how little they knew about the role and discipline specific skills of clinicians from professional groups other than their own. For example:

> *We have a superficial understanding of what each professional group does. (Inpatient 3 - Nurse- I13).*
>
> *I'm surprised by the lack of depth that people have about other people's roles. (Inpatient 4-Psychologist-I 18).*
>
> *I think for a large part we don't understand what we do. (Inpatient 5-Social Worker -I3).*
>
> *Washing clothes [OTs and Nurses]. That surprises me. If they were doing a living skills assessment and wanted to see how someone did ADLs, how they shopped, how they cooked but I wouldn't see it as their day-to-day work unless they were doing an assessment. (Community 3-Nurse-I10).*
>
> *You can't differentiate a social worker from an OT from a psychologist in the community. I don't know what else they can do… their skills… I don't know… because we are all care coordinators. (Community 4-Psychologist-I8).*

It was evident that each professional group in the mental health service had a superficial understanding of the training, skills and competencies of the other professional groups. While the researcher expected this on community teams where positions are multi-graded, it was also evident on inpatient units.

6.3.4 Blurred Boundaries

Most clinicians reported that blurred boundaries were more common in the community setting. Multi-graded positions, the care-coordination model of care, team composition and resourcing were factors that contributed to the blurring of boundaries between professional groups. For example:

> *I think there's definitely a clearer role allocated to nursing staff on an inpatient unit versus the occupational therapist role versus the psychologist versus the social worker because case managers are a group with a different skill set depending on who is in that group… there is a lot of crossover in the roles. (Inpatient 1-Psychiatrist -I1).*
>
> *In the community, the roles are much more generic. There is a lot more overlap between us…all the tasks just dovetail into each other. (Community-Occupational Therapist-I11).*

Workplace setting and culture also contributed to role blurring between the professional groups. For example:

> *It's almost like every ward has its own culture and…defines the role and scope of each discipline… and how much crossover there is… [your role] varies just depending on which unit you're placed on and whether you are placed on a community or inpatient unit. (Inpatient 2- Occupational Therapist - I15).*

> *There's been so much blurring… between the nursing and occupational therapy roles… occupational therapy used to be a nursing role, but they took over some of the nursing activities…so there's a bit of tension. (Inpatient 3- Nurse- I13).*

Participants reported that blurred boundaries created inter- and intra-disciplinary tensions. This arose because each discipline attempted to protect their discipline specific skills and positions within services. For example:

> *I think that when people are stressed and pressured and have a lot of work on I think that there's a tendency for people to protect their territory, protect their turf… historically some older nurses have some anti-OT sentiments because they feel OTs took their jobs. (Inpatient 4- Nurse- I20).*

> *When I worked in the inpatient setting… it's very clear what I do and I don't step over into something else that I'm allegedly not supposed to do… it's very siloed… [Psychologists say] we don't touch consumers, if we touch them it's assault, I keep getting told that so many times and I'm like, OK, but we are allowed to because that has apparently been our training. That's probably the discipline that dissents with us the most. (Community 3-Occupational Therapist - I11).*

Blurred boundaries contributed to the development of faultlines between disciplines. There was some dissent expressed by clinicians as to which group or groups had the training and skills to provide the psychosocial and psychological interventions. This dissent is demonstrated by the following statements:

> *Well the biggest {source of tension] for neuropsychology is that often OTs will do a functional assessment and in there they have a section that they call cognitive assessment… so they write in our notes that they did a cognitive assessment and they found [certain] things and that's not really their area. (Inpatient 5-Psychologist-I14).*

> *I don't think it is necessarily an OT specific thing, but I think OTs tend to do it better than other disciplines…psychosocial interventions and groups… I think with some key therapies*

and interventions, the broader community attribute to one profession… so whether it is true, or not, a layperson will know, that any psychological therapy has to be done by a psychologist. Whereas in reality if you have the training for certain things any discipline can actually provide that. (Community 4-Occupational Therapist-I11).

I see a lot of overlap, like a Venn diagram, social work and OT, their assessment aspects, then psychology…there is that overlap…mainly in psychological therapies. (Community 5-Psychiatrist-I19).

Participants reported that blurred boundaries between disciplines resulted in clinicians feeling deskilled and their discipline specific skills underutilised and undervalued. These sentiments were expressed by both community and inpatient staff, that is:

I guess people are very focused or maybe bogged down with very specific tasks and a lot of the therapy doesn't get done, it gets left out… people forget these skills or the service forgets that those individuals have those skills. (Inpatient 6 -Psychiatrist- I2).

I'm concerned from a nursing point of view [in mental health] some of the nurses have lost skills… there are so many things that nurses do that often don't get seen… and don't get realised or recognised. We don't value the nursing role enough. (Inpatient 7- Nurse - I20).

After a few years working in the community [new grads, or junior clinicians]… they probably lose all their skills as a clinician from their specific background. (Community 6 - Occupational Therapist - I10).

6.3.5 Individual Professional Characteristics Contributing to Role Blurring

Participants reported a triad of individual professional characteristics shaped the role enacted. These are clinical experience, specialist training and individual skills. Together they combined to result in further role blurring between disciplinary groups. The following are statements that reflect this point:

You need the right staff; you need the right experience and training… I guess this can mean a bit of confusion in some areas…like CBT, DBT, groups. (Inpatient 1-Psychiatrist- I1).

Some social workers will do everything…like welfare workers but many of us have training in motivational interviewing, counselling, DBT, group work, family therapy… we can do all that…even though we don't get a chance to… (Inpatient 2-Social Worker-I4).

It depends on what people are prepared to do in their role… their experience and training. (Community 1-Psychologist-I8).

It depends a lot on the individual… some people are all-rounders and have lots of different skills and that can be across the disciplines but some people are more rigid in terms of what they will do… (Community 2- Nurse- I10).

In addition to membership of a professional group, participants stated specific training was required to ensure competence in the delivery of psychotherapeutic interventions. Being a psychiatrist or clinical psychologist did not guarantee you were able to offer specific psychotherapies. The issue was explained in the following manner:

The key determinant is whether we have the proper training… we're not trained to do it [legal aid, financial management orders, accommodation] whereas social workers are… but we do it anyway... (Inpatient 3– Nurse- I13).

It's not something you can do just because you're a psychologist [different models of therapy] you obviously have to do the training. There's additional training to make you proficient and competent in that area…Like DBT groups are run by psychologists, OTs and social workers. (Community 3- Psychologist - I16).

You know I have some training and experience with CBT, motivational interviewing and assertiveness training and a number of things that…are usually seen more as a task of psychologists…. Whether you have the right training is important… (Community 4- Psychiatrist-I6).

Sharing similar theoretical backgrounds and training contributed to feelings of closeness and affinity between the professional groups. While this was beneficial to consumer care, similarity between professional groups also resulted in more role blurring. For example:

So I think there are certain disciplines that are more around policies and procedures and experience and there are certain disciplines that are more around evidence and knowledge… so psychiatry and psychology fall more under the latter. We are similar except for the medication part…we work similarly (Community 5-Psychiatrist-I19).

Conversely, less similarity between professional groups' theoretical background resulted in less role blurring and reinforced professional distance and difference. It was explained in these ways:

We have different treatment models… the medical model as opposed to the recovery model… the treatment goals are different… like psychiatry the treatment goal is for the person to have less symptoms and better response to medication… lower risk to living by themselves in a

community but OTs we, look at the living skills aspect, whether the environment is the right environment for them to live in whether the challenge is too great… or whether they can look after themselves. (Inpatient 4- Occupational Therapist-I12).

A lot of the work that we do focuses on the social determinants of health and the impacts… psychiatrists have a prescriptive medical model approach… with symptom management as the focus… I mean they're at the pointy end of admission… we use the recovery model and we've got trauma informed care, we look at people's strengths and see how we can build their strengths… and it's very much person-centred. (Inpatient 5-Social Worker-I17).

6.3.6 Questioning if the Arrangements Represented a Best Use of Skills

Participants reported that the mental health service needed to consider whether the discipline specific skills of allied health clinicians could be used more effectively. This situation led to questioning if the service was able to meet the needs of consumers appropriately. For example:

We are too bogged down in the day-to-day that we don't have time to use our skills… properly… or at all… (Inpatient 1-Psychiatrist-I1).

I think it's such a pity we are making everybody do everything and not then have the time or the resources to actually access those skills that we've spent so much time and energy and have passion for… Maybe we need to look at how jobs are structured that somehow allows for some generic activities to be completed by everyone because they have to be done… but then also have… quarantined time where specific skills of that discipline are being used. (Community 1-Psychologist-I16).

I think we need to better define the skills for our discipline…so we know and others know the specialist skills that we can deliver to consumers and carers and how those specialist mental health social worker skills add value…instead of what we are doing currently. (Community 2-Social Worker-I3).

A strong focus on generic activities did not allow allied health clinicians to capitalise on their full range of discipline specific skills and talents in the delivery of consumer care. For example:

We need to learn from other disciplines in claiming our role as important…we have skills in groups, counselling… but I think we just sort of backed away and focused on physical care… and let OTs take over some of those nursing skills. (Inpatient 2-Nurse-I20).

I think there are few allied health clinicians that would say that they feel they have access to resources or enough allied health clinicians in their environment to actually be able to use their skills and do the job they want to do effectively. (Community 3-Psychiatrist-I19).

I can do a of work in skill building, functioning, do living skills assessments and things like that but because I am in a generic position as a care coordinator I don't really get to do those things…I'm busy running around to GP appointments, taking medication, CTOs… (Community 4-Occupational Therapist-I10).

The similarities in role activities potentially negated the unique professional contribution that could be made. Additionally, role substitution was more prevalent and this further discounted the role specifics of each profession.

6.3.7 Summary

Each professional group in the mental health service was defined by their skills and the role they performed. However, a focus on generic activities resulted in blurred boundaries, tension and the appearance of faultlines between the professions. A lack of role clarity resulted in clinicians feeling deskilled and devalued. Blurred boundaries occurred on community teams due to multi-graded positions and they occurred on inpatient units. Clinicians reported that culture, resourcing, team composition and skill-mix contributed to role blurring. They also reported that individual skills and specific clinical experience further contributed to role blurring. The most role blurring occurred between nurses, occupational therapists, social workers and psychologists. Psychiatrists, while similar to psychologists, had more clearly defined roles than the other four professions, as well as leadership positions by which to differentiate themselves. Clinicians were surprised at the superficial understanding they had of the training and skills of professional groups other than their own. The concept of leadership is discussed in the next section.

6.4 Theme Three – Leadership

Leadership, which covers power and authority and how this affects relationships and negotiations between the disciplinary groups, was the third theme. Six of the codes were grouped under this theme. Participants were asked to describe the activities that they performed daily in attempting to meet the needs of consumers of the mental health service. In describing these activities, the notions of leadership and negotiations around decision-making emerged. The structure of this sub-section is as follows: first leadership; second authority;

third power – individual and collective; fourth competition for power; fifth the relationship between management and leadership; and, sixth the impact of resourcing.

6.4.1 Leadership

Participants from the five disciplines were unanimous in identifying leadership as a central aspect of the role of psychiatrists. Psychiatrists saw themselves as having a leadership role on teams, units and in the mental health service in general. The concept of psychiatrists as leaders did not appear to be challenged by members of the other disciplines as demonstrated by the following statements:

> *Yes, I do see leadership as part of the role, even though I do like a collaborative approach. It's a complex role as far as not treading on people's toes and letting people have complete autonomy, but also taking on the clinical lead role within the team. (Inpatient 1-Psychiatrist-I2).*

> *The [psychiatry role] is coordinating family, informing them, having family meetings and I think it's better when there is one person… I guess it's kind of having someone in charge. Yeah a leadership role… you have to have one, at least one person taking ownership for it all… (Inpatient 2-Psychologist-I14).*

> *At the end of the day, whether we like it or not, we always defer to whatever decision the psychiatrist makes on a team and they will also tell you at the end of the day the buck stops with them… they lead... (Community 1-Occupational Therapist-I11).*

A very clear hierarchy emerged with psychiatry at the top and the other four disciplines jostling for position underneath. Clinical governance processes, culture, expectations and physical environment reinforced the hierarchy between psychiatry and the other disciplines. Reflective of this situation are the following statements:

> *Psychiatrists and medical staff are on a tier of their own… I think it is the culture and the hierarchy within what is essentially still a medical model… the psychiatrists are seen as separate… seen as better, let's be honest…there's an assumption that they're more skilled or… just higher up… powerful… they sit downstairs in their own offices… Clinical governance rests with the psychiatrists. (Community 2-Psychologist-I16).*

> *Obviously, the hierarchy hasn't escaped me and I do feel that that is consistently reinforced… the manner in which things are challenged or discussed is very deferential to Psychiatry. (Community 3-Social Worker-I5).*

6.4.2 Authority

Participants identified that authority came from the capacity to make final decisions, clinical governance processes and the medical model operating within the mental health service. The medical model reinforced the rigid hospital hierarchy where authority and dominance is vested in the medical profession. Participants expressed their views in the following ways:

> *…being the psychiatrist you definitely have… the decision making … it does fall to the psychiatrist… there's still very much a medical model even with a multidisciplinary team. (Inpatient 1-Psychiatrist-I1).*

> *I've always tried to keep everybody on the same playing field but that's not how the system works. Psychiatry sits outside of it. (Community 1-Psychologist-I16).*

> *The medical model is very strong in mental health… psychiatrists are in charge of all clinical decisions… the buck stops with them… and we all know that… (Community 2-Social Worker-I3).*

Personality attributes and role in the organisation were also identified by participants as sources of authority. For example:

> *I think being a psychiatrist you… automatically have authority, nursing would depend on what your nursing role is as to how much authority is being delegated… the discipline of psychiatry emerged from medical models, so the power structure has the doctors on top of the authority tree…. (Inpatient 2-Psychiatrist- I2).*

> *Occupation plays a role but also personality… has impact on the authority that a person has in a team (Community 3-Nurse-I7).*

6.4.3 Power – Individual and Collective

Participants reported that leadership, authority and power were closely associated. Psychiatrists were the only professional group that had all three attributes due to the dominance of the medical model in the mental health service. Psychiatrists stood above the other clinical groups as reported by these types of statements:

> *As a psychiatrist, you have authority and power. (Inpatient 1-Psychiatrist-I1).*

> *Yeah, so that's the practice here and, and in most places I've worked… the doctors' offices are quite separate and they sit in a completely different place to the rest of the team… It's psychiatrists, then us… (Community 1-Psychologist-I16).*

We always defer to the psychiatrist… the buck stops with them. (Community 2-Occupational Therapist-I11).

However, participants were also able to identify two different types of power, individual and collective power. They reported most psychiatrists automatically possessed individual power by virtue of belonging to the medical profession. They also recognised the collective power of nurses. Over 65% of clinical staff in the mental health service are nurses while only 15% are psychiatrists and 19% are allied health. Thus, the collective power of nurses was evident in operational matters. For example:

Psychiatrists are in charge with clinical decisions… they have final say… but nurses are a pretty powerful group too. They run the show on a day-to-day basis… there's a lot more of them than any of us… you don't want to get on their bad side. (Inpatient 2-Social Worker- I4).

Doctors on an individual level seem to have a lot of power in the system but nurses at a group level tend to have quite a lot of power... a collective power. In terms of general administrative decisions, they have a much larger role in… what is offered within services and how those resources are distributed… It's got a lot to do with numbers of nursing staff versus other clinicians and obviously power comes in numbers. (Community 3-Psychiatrist-I19).

6.4.4 Competition for Power

Competition for leadership and power was most evident between psychiatrists and nurses. This competition for power occurred in two distinct areas – decision-making in operational and clinical matters. While psychiatrists were prepared to accept that nurses had more power in operational decisions they were determined to keep their position in the hospital hierarchy by maintaining the lead in clinical governance matters. For example:

Most of the management positions are filled by nurses…they kind of run things… (Inpatient 1-Psychologist-I14).

There is a hierarchy in mental health…, especially in the acute setting, around resource availability and that is driven by a nurse hierarchy, but, and that's a very powerful nursing hierarchy in mental health, more so than any other clinicians… But ultimately, it comes down to the doctor who makes the decision [regarding patient care] at the end of the day. (Community 1-Psychiatrist-I19).

Nurses, however, expressed resentment with the psychiatrists' determination to maintain power over them in clinical matters. Whether in acute or community settings, the reaction was the same:

Psychiatrists sometimes leave the things they don't want to do to nurses after they make the decisions. (Inpatient 2-Nurse-I13).

There's more tension between psychiatrists and nurses around decision-making. It's left to nurses to do all the work. (Community 2-Nurse 1-I9).

6.4.5 Management

Participants reported on a barrier between management and clinicians and noted that nurses and psychiatrists were more likely to be appointed to management roles within the mental health service. A "them" and "us" philosophy was more apparent among community staff. For example:

I don't think we communicate well across the layers of the service… management decisions are made that make no sense to clinicians. (Inpatient 1-Psychiatrist-I2).

I think there is a big divide from the upper executive all the way down to the people on the ground. It seems it's all about risk and ticking boxes… (Community 1-Nurse-I10).

Unfortunately, I don't think our [skills] are always valued by management and I think there's an expectation that we can… do everything and you know I think it is taking away from allowing us to do what we're good at. (Community 2-Psychologist-I16).

Participants identified the need to provide allied health clinicians with more opportunity to undertake management roles. A common perspective is reflected in the following statement:

Perhaps there is a role for allied health to have greater control over leadership and management decisions though that comes down to resources and other factors as well… the role of allied health and a leadership and management role in the IPCU setting is going to be less relevant than in say the rehab ward or the community setting. (Community 3-Psychiatrist-I19).

6.4.6 Resourcing

Clinicians reported that resourcing and team composition on inpatient units contributed to the blurring of boundaries between disciplines. They identified that resourcing shaped the environment, culture and workplace setting, all of which affected scope of practice for each discipline. Participants explained it in the following ways:

Every place I've worked in… what an OT does looks different at each place. It's almost like every ward has its own culture and… defines the scope of practice of each discipline… and that varies depending on which unit you are placed on or whether you are placed in an

inpatient or community setting. Even within the discipline there is blurring… we have found with this small project… the OTs at Concord look slightly different to the OTs at PMBC. It's like environment and workplace determines your scope of practice. (Inpatient 1-Occupational Therapist-I15).

Some of these activities I think are not specific to social work that may have become the remit of social workers through some sort of historical development. I think it is a throwback from Rozelle as well certain expectations of other staff about what social workers should do as opposed to what we're trained or better skilled to do. (Inpatient 2-Social Worker-I4).

Participants reported that inadequate resourcing of mental health services not only affected the delivery of care, but also compromised the quality of care. For example:

We do not have enough time to do our job, no one has enough time to do everything that they should do in their job currently… so you focus on the tasks that you need to do to deliver[basic] care. It's so frustrating… (Inpatient 3-Psychologist-I18).

There's a big gap in resources even within this hospital when it comes to staff to service these people. Spreading ourselves thinner and thinner… everybody's getting a poorer and poorer service… and so it leads to bad outcomes and poor service. (Inpatient 4-Social Worker-I17).

There's no doubt that allied health is under-resourced in mental health. Most wards don't have appropriate allied health cover. Lack of resourcing is a huge issue… I think there are very few allied health clinicians that would say that they have enough access to resources or enough allied health clinicians in their environment to actually be able to do the job they want to do effectively. (Community 1-Psychiatrist-I19).

6.4.7 Summary

The medical model was evident in the responses from participants. reinforced the hospital hierarchy. Psychiatrists were perceived as the leaders in the mental health service by all professions, including their own. They were also viewed as possessing individual power and authority. Nurses were the group most likely to challenge psychiatrists for power through their collective numbers. While psychiatrists maintained leadership, authority and power in clinical decision-making, nurses had more influence in operational matters and management issues. Allied health professional groups were not perceived as having leadership roles, individual or collective power. Most participants including psychiatrists reported that the mental health service needed to create opportunities for allied health clinicians to move into management roles. Most participants identified that power enabled clinicians to have more

control over their role and therefore spend more time utilising discipline specific activities in the provision of care. Most participants wanted to spend more time using their discipline specific activities to meet consumer needs. Consumer needs are discussed in the following section.

6.5 Theme Four - Consumer Needs

Four of the codes were grouped under the theme consumer needs. This theme covered what healthcare staff do now and what they will need to do in the future to meet the full range of needs of consumers of the public mental health service. Participants were asked whether they thought that the SLHD mental health service was meeting the needs of consumers. They were asked to identify which needs were being met, which needs were not being met and why. Participants were also asked to identify what needed to change in order to meet the needs of consumers in the future. The structure of this sub-section is as follows: first, basic consumer needs are only being met; second consumer needs that are not being met; third what is required to meet consumer needs in the future; and, fourth the need for management to support staff and skill development.

6.5.1 Basic Consumer Needs are only being Met

Participants reported that consumer needs were being met in the areas of psychiatric care, accommodation and medico-legal requirements (under the *Mental Health Act 2007* and the *Mental Health (Forensic Provisions) Act 1990*). Clinicians stated that the mental health service was only meeting basic consumer needs, for example:

> *I think we cover the basics of care… medication, psychiatric reviews, filling out housing forms, basic referrals, finances and paperwork. (Inpatient 1-Psychiatrist-I2).*

> *I think we address medical and physical needs relatively well… I'm basing this on my experience but we focus on the physical aspect of care rather than psychological interventions… (Inpatient 2-Nurse-I13).*

> *I think we are meeting basic needs… just basic… medication… making sure [consumers] don't harm themselves or other people and that's it… (Community 1-Occupational Therapist-I11).*

> *We made a lot of ground with consumer groups, consumer collaboration and consumer driven research over the last couple of years but I think we are still giving it some lip service…we prioritise medication and risk. (Community 2-Social-Worker-I3).*

As noted in the quotes above, participants identified the service delivered basic care. That is, care that sought to promote safety and minimise risk. As the next section highlights, the participants perceived that the service had little time for clinical or therapeutic interventions.

6.5.2 Consumer Needs Unmet

Psychosocial and psychological interventions were identified by parctipants as gaps in the mental health service. Furthermore, participants reported that providing more of these long-term interventions would enable consumers to better manage their mental health and live independently in the community. The point was made in the following ways:

> *Yes it's one of these big gaps… the psychological therapies and that's just a resource issue across services… a gap that's partly related to resource allocation, but also the skill set of the people providing care… they don't all have these skills available. (Inpatient 1-Psychiatrist-I1).*

> *I get very concerned that it's an overly medical model and I think that's related to a very short term approach… the community approach is episode of care and I think over time that will end up being very costly for our consumers, because of increased recurrences, increased disability and a lot of losses. So it's about quickly getting people well enough to discharge as opposed to actually doing the work, psychotherapeutic and psychosocial which will decrease future relapses and improve the quality of their life. (Community 1-Nurse-I10).*

> *There is a very paternalistic attitude from the Mental Health Service towards the consumer. There's very much a them and us attitude. We provide the service to them. We talk about recovery… strengths based language… but at the end of the day, if you listen to care coordinators talk… it's I have to do the CTO, I have to… talk about their side effects with the doctor… we need a broader focus on living needs, psychological needs, social needs, recreational needs. We are just skimming the surface. (Community 2-Occupational Therapist-I11).*

Participants were clearly frustrated at not being able to offer therapeutic interventions that could potentially reduce readmission rates and relapses. They described a task-focused and under-resourced mental health service, as demonstrated by the following statements:

> *I think the push to get patients out is just so high… but you know if some of the patients stayed in for a few days more or an extra week they would be so much [better] and wouldn't need to come back to hospital again and again … later. (Inpatient 2-Psychologist-I14).*

There's a whole range of interventions we can provide but we aren't doing any of that… we need to do more work to keep people better… we need to do more work with carers and offer them psychological interventions and counselling… but we are not proactive… all we do is provide knee-jerk reactions. (Community 3-Social Worker-I3).

Participants identified gaps in services for specific populations, such as indigenous consumers and those with borderline personality disorders. These issues were identified as stated:

The focus is more on psychopharmacology than psychotherapy… we have gaps with the indigenous population, personality disorders and addressing their needs…. (Inpatient 3-Nurse-I13).

You just end up providing this substandard service when you expect people to do everything and nothing at the same time… we just don't have enough frontline workers… I think there is a massive gap in therapy… people can't afford to pay for private therapy. They're not bad enough for us and not financially stable enough for the private sector. People with long-term psychological difficulties like personality disorders; you know the ten sessions through Medicare isn't going to cut it. (Community 4-Psychologist-I16).

The picture emerging from the participants is one of forced choice. A need to deliver services to address immediate needs, associated with physical and psychological safety/risk. While providing these services, participants are acutely aware of their inability to focus on consumers underlying problems and dynamics that necessitated the ongoing use of the service. From this tension, participants identified areas for change, as discussed below.

6.5.3 Future Needs and What Needs to Change

In terms of future needs, participants reported a greater focus on therapeutic interventions was required. They advocated for less time spent on generic and administrative tasks at the expense of clinical care. For example:

Across all areas, people are bogged down with very specific tasks and a lot of the therapy doesn't get done, it gets left out... (Inpatient 1-Psychiatrist-I2).

We focus on the physical aspect of care rather than psychological interventions… (Inpatient 2 Nurse-I13).

Common sense has to prevail at some point but we do have… all this ticking of boxes… do the task and do your stats and do this… tick, tick, tick…sometimes at the expense of good clinical care in my opinion. (Community 1-Nurse-I10).

Participants reported a standardised, long term, holistic approach using discipline specific skills, was required to address the gaps in service delivery. This idea applied to both inpatient and community based services. For example:

We need a long-term therapeutic approach to patients… a collaborative multidisciplinary approach using everyone's skills… rather than this very superficial approach to patients… in-patient and in the community. (Inpatient 3-Psychiatrist-I2).

I guess making more use of each discipline's skills for components of someone's care... (Inpatient 4-Occupational Therapist-I15).

Perhaps some of the activities under social work could be performed by allied health assistants… then social workers can use their skills more (Community 2-Social Worker-I5).

We need to standardise our approach… (Community 3-Nurse-I10).

Consumers are not really getting what they want in a cohesive way… it's not holistic (Community 4-Occupational Therapist-I11).

The key to moving forward and building better mental health services in the future, according to participants, was straightforward. That is, it could be achieved through collaboration and good communication between staff. For example:

I think the communication between different disciplines… needs to be improved… knowing everyone else's role and respecting each other's role and opinions and really working collaboratively in the team. (Inpatient 5-Occupational Therapy-I12).

It will be nice from my point of view if we were able to work more collaboratively with other disciplines… and say well actually you know we cover the ward when you guys go off to your supervision. Would there be a chance someone could cover for us to go? (Inpatient 6-Nurse-I20).

On the one hand you want there to be a distinction… delineation between disciplines but you also want collaboration. (Inpatient 7-Social Worker-I3).

Participants reported multidisciplinary collaboration was more likely to be successful when a number of actions occurred. Different disciplines needed to be recognised for their unique

contributions and skills, and given the opportunity to use these skills, thus respecting and valuing their contribution. For example:

> *A good example of multidisciplinary working is where everyone is heard and everyone's opinion is asked for. (Community 5-Social Worker-I5).*

> *I think we have to look at what each [professional]group is good at so that everybody feels like they're actually being valued. (Community 6-Psychologist-I16).*

6.5.4 Supporting Staff and Skill Development

Participants reported that each professional group needed to develop better communication skills. When a profession could or did communicate their unique skill set, they could then create opportunities for their implementation. These ideas are demonstrated by the following statements:

> *In order for us to better address the needs of consumers, we actually need to communicate how we have met those needs but not just the medication aspect but also the interventions provided by Allied Health… in a way that will… assist with developing some sort of recognition of the skills that Allied Health have and can contribute to consumer care. (Inpatient 1-Occupational Therapist-I12).*

> *The risk with Allied Health is that the service forgets those individuals have certain skills. I think they have to be more assertive in liaison with management but then I guess it's also about training up, skilling, working, over time and identifying with Allied Health what skills are required and offered and how to work together. (Inpatient 2-Psychiatrist-I2).*

> *I think each discipline does need clarity about what their role is and to promote what their skills are but I also think we need to be careful not to be so rigid and precious that we don't actually benefit the consumer because we are too busy fighting amongst ourselves. (Community1-Social Worker-II5).*

Clinicians reported that in order to communicate the unique skills of each professional group, they needed to develop better competency frameworks for each location. This means frameworks uniquely applicable to acute care, rehabilitation, psychogeriatric units and community teams. For example:

> *We just need some more clarity around our roles… like written competency frameworks… (Inpatient 3-Nurse-I20).*

I think developing site-specific discipline competencies and lists would be helpful to communicate each discipline's skills. (Community 2-Occupational Therapist-I11).

So in some ways… we actually need to develop physical resources and documents that would allow clinicians with certain skills to identify those skills… (Community 3-Psychologist-I16).

Participants thought management had a role to play in addressing this problem. Managers needed to introduce targeted strategies and models of care for the different settings. Models of care that supported staff to achieve a balance between using their discipline specific skills and in completing the administrative and generic tasks required of them. For example:

I feel it would be more economical and beneficial to use someone's skills to the max… so you are using skilled people to do skilled roles… people who have… specific skills to do certain things … so more of their time can be used with the more complicated cases rather than just spending the time filling in forms… managers need to see this. (Inpatient 4-Nurse-I13).

I think we need more CSOs, admin support, data entry, admin staff… much more now than ever to free up the one-to-one time of clinicians, which is so desperately needed… (Community 4-Social Worker-I3).

It starts with governance… things from the top dribble down to the bottom, management need to step up and support clinicians in using their skills and in providing a proper service…not something piecemeal. (Community 5-Occupational Therapist-I11).

6.5.5 Summary

Participants reported that they perceive that the mental health service is meeting consumer needs in two essential ways: across basic physical and social requirements; and psychiatric care within a medico-legal framework. However, they did not think consumer needs are being met in relation to the provision of longer-term psychological and psychosocial interventions. In order to meet the needs of public mental health consumers in the future and address the gaps in service delivery, participants suggested several changes. These include providing therapeutic interventions and exploring different models of care that effectively utilise discipline specific skills in different contexts. Interventions and services that target specific populations, such as indigenous consumers and those with personality disorders are also needed, according to participants. To achieve this, participants argued that a collaborative, holistic approach that is supported by management is required. That is, an approach that recognises the unique contribution and skill set of each professional group in the treatment and management of consumers with mental illness.

6.6 Chapter Summary

A combination of discipline specific and generic activities is required to meet the needs of consumers of the mental health service. An emphasis on physical care and generic activity has resulted in blurred boundaries, tension and faultlines between the professional groups. Lack of role clarity has resulted in clinicians feeling deskilled and unvalued. Lack of role clarity has contributed to a superficial understanding of the discipline specific skills of each professional group. Crossover in activities between disciplines has affected professional identity with many struggling to explain what they do and how to differentiate their discipline from the others in the mental health service. The medical model has maintained medical dominance and power in the mental health service. This is of concern because within the context of mental healthcare a holistic approach is required.

The next chapter presents a discussion of the triangulated data and overall findings. The contributions this research has made to the literature, the limitations of this study are discussed, and areas for future research are identified.

7. The Nexus of Power, Identity and Activities: Contested Roles and Responsibilities

7.1 Introduction

The purpose of this study was to investigate the role of allied health professional groups in the delivery of care to consumers of the public mental health service. This chapter draws the findings together from the previous two chapters with the literature and theoretical model from the beginning of the thesis. The discussion centres on the nexus of professional power, identity and activities, the result being contested roles and responsibilities.

Chapter Five investigated the relationship between activities, role, professional identity and power. The chapter presented this information in four sections. First, the activities performed by each of the professional groups and time spent delivering discipline specific activities were explored. Second, which group should perform these activities was articulated. Third, the strength of professional identity and the relationship between discipline specific activities and professional identity were examined. Fourth, the interaction between professional identity, discipline specific activities and power was explored.

Chapter Six reported staff views about their activities, roles, power relationships and the needs of consumers. The chapter presented this information in four sections. First, the activities staff perform were detailed; second, staff roles were explained, as well as staff understanding of the role of other professions was examined; third, power relationships between the professional groups were investigated; and, fourth, staff perceptions as to whether the mental health service is meeting the needs of consumers were discussed.

In this chapter, findings from Chapters Five and Six were integrated to derive answers to the research questions and hypotheses. The results of the analyses were triangulated to strengthen the validity of the findings (Flick 2004; Hussein 2015; Jick 1979). In this study, the researcher used a number of methods of triangulation. First, the methodological method was used consisting of questionnaires and interviews. Second, environmental triangulation was used - data was collected from staff of inpatient and community teams, as well as staff rostered on day shifts, night shifts and weekends. The triangulated data provided a deeper and more nuanced understanding of professional identity, role, power and activities in the public mental health service.

The results are now discussed in this chapter, which comprises eight parts. This first part has provided a high-level overview of the research to date. The second part recaps the theoretical

model. The succinct answers to the eight research sub-questions and hypotheses are presented in the third and fourth parts, respectively. The fifth part discusses the nexus between power, professional identity and activities, linking the key research findings with the literature. The sixth part provides the answer to the overarching research question. The seventh part presents the contributions made by this study to the theoretical and empirical literature, and the final part is a summary of the chapter.

7.2 Theoretical Model and Research Questions and Hypotheses

The 4FM-PI presents the relationship between tribal, role, professional identity and stakeholder theories, as well as specific versus generic skills (Figure 7.1). The four factors that contribute to strength of professional identity are belonging (tribal theory), attachment (role theory), power (organisational hierarchy) and activities (discipline specific and generic). This synthesis of these theories, produced by this study, is a new, unique combination to create a multi-factorial and multi-dimensional model of professional identity.

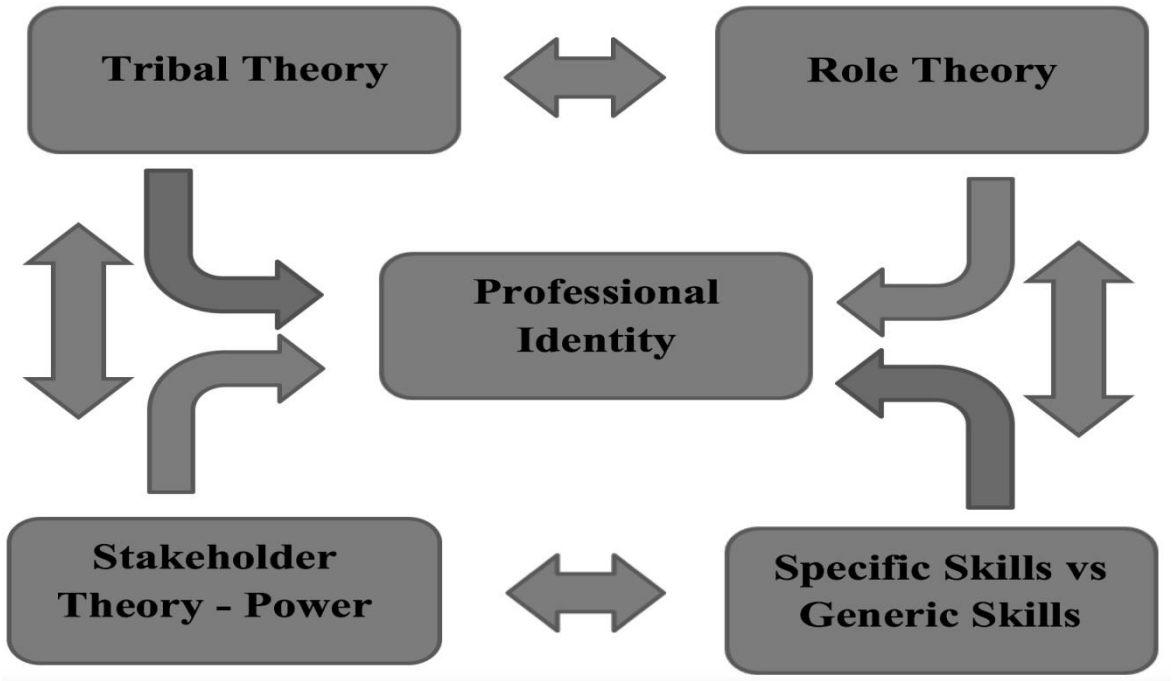


Figure 7. 1: The 4FM-PI Model

The aim of this research was to answer the overarching question: what is the role of allied health in the future of public mental health services? The research also answered eight research sub-questions and tested three hypotheses, which are interrelated (Table 7.1 and Table 7.2). The eight research sub-questions were divided into four themes - activities, skills, professional identify and power.

Table 7. 1: Research sub-questions

Themes	Questions	Hypotheses		
		H 1	H 2	H 3
1. Activities	1.1 What activities are performed by the five disciplines in the mental health service?			
	1.2 How much time is spent by each discipline on performing these activities?	×		×
2. Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?			×
	2.2 Who does each discipline believe should perform these activities?			
3. Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	×	×	×
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	×	×	×
4. Power	4.1 What is the interaction between professional identity, discipline specific activities and power?		×	
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?			

Table 7. 2: Hypotheses

Hypothesis	
4.	Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.
5.	Strength of professional identity will have a positive relationship with power.
6.	There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

7.3 The Research Questions: The Nexus of Power, Identity and Activities

In this section, the answers to the eight research sub-questions are presented and discussed. The eight research sub-questions correspond to the four themes of activities, skills, professional identity and power.

7.3.1 Activities – Theme 1

There were two sub-questions under the first theme, activities. The first sub-question was: what activities are performed by the five disciplines in the mental health service? The second sub-question was: how much time is spent by each discipline on performing these activities?

7.3.1.1 Activities – Sub-question 1.1: What Activities are Performed by the Five Disciplines in the Mental Health Service?

The top 20 activities that are performed by each of the five disciplines are presented below (Table 7.3). All clinicians performed a combination of both clinical and generic activities daily. The activities performed by clinicians in the mental health service could be grouped into eight categories. The eight categories are: (1) clinical activities - discipline specific; (2) both clinical and non-clinical generic activities (activities that are performed by all disciplines, but have discipline specific content and focus such as education, meetings, research and documentation); (3) non-clinical generic activities (such as administrative tasks and some mandatory training); (4) internal clinical process activities - assessment and formulation; (5) clinical process activities – therapy; (6) clinical process activities - continuity of care; (7) activities related to external providers; and, (8) non-clinical continuity and support activities. Table 7.4 shows how the top 20 activities performed by each discipline can be grouped into the eight categories.

Table 7. 3: Top 20 activities performed by each discipline

	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**
1.	Give Medication Oral and IMI	Living Skills Assessment	Medication Prescribing	DBT Consultation	Follow-Up Housing-Other Forms
2.	One-to-One Nursing Care	Assist Consumer with Shopping	Medication Review	Psychological Therapy	Assist with Legal Aid
3.	Administer PRN Medication	Outing with Consumers	Pathology Requests	DBT Group	Create Repayment Schedule
4.	Nurses Meeting	Assist Consumer with Legal Aid	Review Medical/Blood Results	Individual Therapy	Applications JD, DoH, DSP
5.	Supervise Consumer Bathing	Assist Consumer Clean Room	Referrals	Phone Counselling	Financial Management Order Hearing
6.	Nursing Ward Rounds	Assist Consumer Wash Clothes	Patient Medical Assess/Review	Financial Management Order Hearing	Assist Consumer Clean Room
7.	Assist	Create	Legal Activity	Psychoeducation	Assist

	Nursing	**Occupational Therapy**	**Psychiatry**	**Psychology**	**Social Work**
	Consumer Wash Clothes	Repayment Schedule	(MHA) Schedules		Consumer with Shopping
8.	Medication Supervision	Organise Consumer Belongings	ccCHIP Referral Form Completion	Groups	Organise Consumer Belongings
9.	Supervise Meal Times	Attend GP Appointment with Consumer	Liaise with Pharmacy	Attend GP Appointment with Consumer	Attend GP Appointment with Consumer
10.	Clozapine Clinic	Supervise Consumer Bathing	Clozapine Clinic	Care-Coordination	Write Support Letters
11.	Outing With Consumers	Groups	Psychiatry Review in Home with Registrar	Mental Health Assessment	Home Visits
12.	Organise Consumer Belongings	Care-Coordination	Complete CTO	Mental State Examination	Visit Burwood Respite
13.	Create Repayment Schedule	Follow-Up Housing Forms	Medication Supervision	Search for Consumer in Community	Care Coordination
14.	Assist Consumer with Legal Aid	Search for Consumer in Community	Mental Health Assessment	Breach CTO	DBT Group
15.	Care Co-Ordination	Writing Support Letters	Mental State Examination	Serve CTO	CTO Hearing
16.	Assist Consumer Clean Room	Encourage Consumer to Engage in Social Activity	Consumer Discharge	Create Repayment Schedule	Breach CTO
17.	Attend GP Appointment with Consumer	Breach CTO	Breach CTO	Risk Assessment	Serve CTO
18.	Assist Consumer with Shopping	Financial Management Order Hearing	Give Medication Oral and IMI	Complete CTO	Groups
19.	Search for Consumer in Community	Complete/ Serve CTO	Psychological Therapy	Organise Consumer Belongings	Complete CTO
20.	Liaise with Pharmacy	Groups	Psychiatry Review in Home with Registrar	Mental Health Assessment	Home Visits

Table 7. 4: Top 20 activities performed by each discipline grouped according to categories

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
1. Clinical Activities – Discipline Specific	1.One-to-One Nursing Care 2.Administer PRN Medication 3.Nurses Meeting 4. Clozapine Clinic 5. Nursing Ward Rounds 6. Supervise Consumer Bathing 7. Assist Consumer Washing Clothes 8. Give Medication Oral and IMI 9. Supervise Meal Times	1.Living Skills Assessment 2. Assist Consumer Washing Clothes 3. Supervise Consumer Bathing	1.Medication Prescribing 2.Medication Review 3. Pathology Requests 4. Review Medical/Blood Results 5. Patient Medical/Assessment Review 6. Legal Activity (MHA) Schedules 7. ccCHIP Referral Form Completion 8. Psychiatry Review at Home with Registrar 9. Clozapine Clinic 10. Give Medication Oral and IMI		
2. Both Clinical and Non-clinical Generic Activities	1.Outing with Consumers	1. Outing with Consumers			
3. Non-clinical Generic Activities					

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
4. Clinical Process- Assessment and Formulation			1.Referrals 2. Mental Health Assessment 3. Mental State Examination (MSE)	1. Mental Health Assessment 2. Mental State Examination (MSE) 3. Risk Assessment	1. Home Visits
5. Clinical Process - Therapy	1.Medication Supervision	1. Create Food Diary Template 2. Groups 3. Engage Consumer to engage in Social Activity	1. Medication Supervision 2. Psychological Therapy	1. DBT Consultation 2. Psychological Therapy 3. DBT Group 4. Individual therapy 5. Phone Counselling 6. Psychoeducation 7. Groups	1. Visit Burwood Respite 2. DBT Group 3. Groups
6. Clinical Process- Continuity of Care	1.Liaise with Pharmacy		1. Liaise with Pharmacy 2. Consumer Discharge		
7. Activities related to External Providers	1.Care-Coodination 2. Assist Consumer with Legal Aid	1.Assist Consumer with Legal Aid 2.Care Coordination 3. Follow-up Housing Forms. 4.Writing Support Letters 5. Financial Management Order Hearing	1. CTO Hearing	1.Financial Management Order Hearing 2. Care Coordination	1. Follow-up Housing Forms. 2. Assist Consumer with Legal Aid 3. Financial Management Order Hearing 4. Writing Support Letters 5. Care Coordination 6. CTO Hearing
8. Non-Clinical Continuity	1. Organise Consumer Belongings	1.Organise Consumer Belongings	1. Breach CTO 2. Complete CTO	1. Attend GP Appointment with	1. Create Repayment Schedule

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
and Support Activities	2. Create Repayment Schedule 3. Search for Consumer in Community 4.Attend GP Appointment with Consumer 5. Assist Consumer Clean Room 6. Assist Consumer with Shopping	2.Assist Consumer with Shopping 3.Assist Consumer Clean Room 4.Create Repayment Schedule 5. Attend GP Appointment with Consumer 6. Search for Consumer in Community 7. Breach CTO 8. Complete CTO		Consumer 2. Writing Support Letters 3. Search for Consumer in Community 4. Breach CTO 5. Complete CTO 6. Create Repayment Schedule 7. Serve CTO 8. Organise Consumer Belongings	2. Applications JD, DoH, DSP 3. Assist Consumer Clean Room 4. Assist Consumer with Shopping 5. Organise Consumer Belongings 6. Attend GP Appointment with Consumer 7. Search for Consumer in Community 8. Breach CTO 9. Serve CTO 10. Complete CTO

Figure 7.2 summaries the research findings on the time breakdown, the activities performed and the horizontal substitution that emerges from this. This outcome is reflective of the shift to community-based care that has created an expectation that work being undertaken by allied health staff requires predominantly generic rather than discipline specific activities (McKenna, Keeney & Bradley 2003). There has been role blurring, concerns and confusion about professional identity, and, professional tension over areas of expertise.

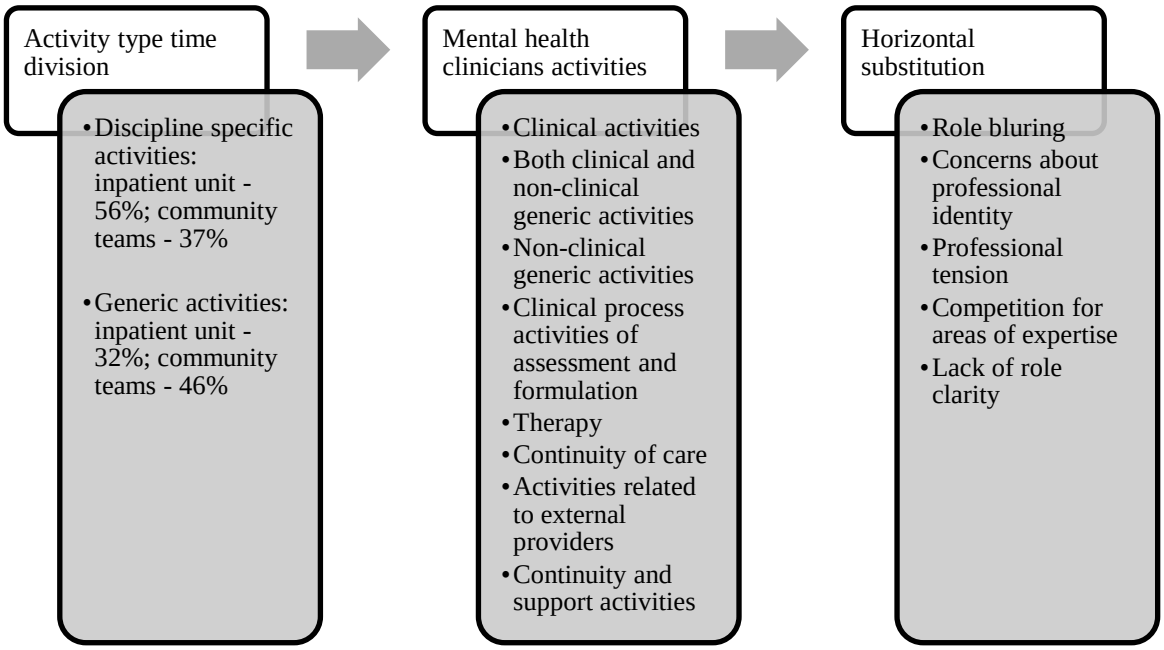


Figure 7. 2: The nexus between activities and time

The results confirmed that the top 20 activities performed by staff from the five disciplinary groups are predominantly generic in nature. Staff were concerned by this and gave voice to their concerns in the interviews. Participants were worried there was more emphasis on hands on activities in the mental health service. They were concerned that there was very limited or no time to perform psychosocial and psychological interventions.

The current biopsychosocial model of care for mental illness consists of a combination of pharmacotherapy, psychotherapy and psychosocial interventions (Hodges 2007; Williams 2015) In order to provide such a service, the role of each disciplinary group must be

clearly delineated and include the delivery of discipline specific activities. Participants thought that while symptom reduction and pharmacotherapy remained the focus of care, their roles were diluted, and discipline specific skills underutilised.

7.3.1.2 Activities – Sub-question 1.2: How much Time is spent by Each Discipline on Performing these Activities?

Table 7.5 summarises the amount of time clinicians from each discipline spend on performing discipline specific and generic activities in the public mental health service. Significant time is spent, by all professions, on generic activities. Conflict for control over similar activities and perceived expertise transpires.

Table 7. 5: Time spent by each discipline on activities

	Discipline Specific Activity (%)	Generic Activity (%)	Difference
Setting			
Inpatient	56	32	Significant
Community	37	46	Significant
Discipline			
Nursing	46	37	Significant
Occupational Therapy	46	50	Not significant
Psychiatry	59	27	Significant
Psychology	53	39	Significant
Social Work	47	40	Not significant

Staff on inpatient units spent about 56% of their time on discipline specific activities and 32% of their time on generic activities. This was in contrast with staff on community teams who spent 37% of their time on discipline specific activities and 46% of their time on generic activities. The difference in time spent on discipline specific (19%) and generic (14%) activities between inpatient and community staff was statistically significant ($p =<0.5$). The results do not total 100 because even when participants were asked to report the amount of time they spent on discipline specific and generic activities as a percentage of 100% they did not reliably do so.

The amount of time spent on generic activities and role blurring on community teams was expected due to the multi-graded nature of positions. Whereas, the amount of time spent on generic activities and crossover of tasks on inpatient units was not anticipated because roles tend to be more clearly delineated. However, clinicians, from all professions, were concerned with the amount of time they spent on generic activities and with the emphasis on the physical aspects of care. The results confirmed that clinicians on both inpatient and community teams spend between 30-60% of their day on generic activities. This type of activity was described as task-focused, hands-on and coercive.

Nurses, psychiatrists and psychologists reported spending more time delivering discipline specific activities than generic activities and the differences for these three disciplines were statistically significant. Occupational therapists and social workers spent about equal time engaged in discipline specific and generic activities. This supports previous findings in relation to the work of occupational therapists and social workers in mental health services (Carpenter et al. 2003; Frost, Robinson & Anning 2005; Lloyd, King & McKenna 2004). The most significant difference overall was for psychiatrists. This was not surprising because psychiatrists have the strongest boundaries of the five disciplinary groups and take a lead in all clinical areas – including delegation of activities and tasks to the multidisciplinary team members. This also supports previous findings in relation to medical dominance (Coburn 2006; King et al. 2015; Nugus et al. 2010). The results for each discipline were compared across inpatient and community settings (Table 7.6).

Table 7. 6: Time spent by each discipline on inpatient and community teams on activities

Discipline	**Inpatient**		**Difference**	**Community**		**Difference**
	DSA (%)	**GA (%)**		**DSA (%)**	**GA (%)**	
Nursing	45	55	Not Significant	70	30	Significant
Occupational Therapy	51	33	Significant	25	51	Significant
Psychiatry	58	42	Significant	29	59	Significant
Psychology	59	26	Significant	59	25	Significant
Social Work	72	28	Significant	43	45	Not Significant

It was evident that clinicians from disciplines, other than nursing and psychologists, spent more time delivering discipline specific activities on inpatient units than on community teams. Psychologists recorded the same amount of time in both settings.

Nurses were the exception to the other four disciplines. Nurses, for example, reported spending more time delivering generic activities (55%) than discipline specific activities (45%) on inpatient units although this difference was not statistically significant. Similarly, unlike the other disciplines, nurses reported spending more time delivering discipline specific activities (70%) than generic activities (30%) on community teams. This is in contrast to previous research where nurses have expressed a fear of losing their discipline specific skills on community mental health teams (Brown, Crawford & Darongkamas 2001; Crawford, Brown & Majomi 2008). An explanation for this may be that there are more allied health staff employed on community teams but they cannot give injections or supervise medication. These nursing specific activities are left to the nurses on these teams, which results in nurses on community teams spending more time delivering discipline specific activities.

Of some surprise was that psychologists on community teams also reported spending significantly more time engaged in discipline specific activities (59%) than generic activities (25%). A possible explanation is that consumers with complex presentations and personality disorders requiring psychological therapy are often referred to the clinical psychologists on community teams, as they are perceived to have the training in targeted psychological interventions required for this cohort of consumers. Of interest too was the result for psychiatrists, which was reversed. Psychiatrists on community teams reported spending 59% of their time on generic activities and 29% of their time on discipline specific activities. The explanation is related to the fractionalisation of psychiatry positions on community teams as well as a flatter hierarchy. Additionally, most community teams are nursing led and even though psychiatrists may be performing discipline specific activities such as medication reviews and prescribing, the procedural nature of these tasks may create the perception that they are generic activities. Psychiatrists on community teams are also likely to be more involved with carers and external providers such as police, accommodation and support services.

The key finding in this section was: organisational setting or location shapes and influences how much time each disciplinary group spends on discipline specific and

generic skills. The recommendations were discipline specific skills needed to be recognised and valued more, and management needed to support greater use of discipline specific skills.

7.3.2 Skills – Theme 2

There were two sub-questions under the second theme, skills. The first sub-question was: do the activities performed by each of the five disciplines require generic or specific skills? The second sub-question was: who does each discipline believe should perform these activities?

7.3.2.1 Skills - Sub-question 2.1: Do the Activities Performed by Each of the Five Disciplines require Generic or Specific Skills?

The five professional groups in the public mental health service engage in both discipline specific and generic activities in the provision of care. Both types of skills are required.

Table 7.7 presents the top 20 activities performed by clinicians of the mental health service. Activities that are perceived to require discipline specific skills as identified by all disciplines are in bold. The psychosocial and psychological therapies are contested among clinicians from all disciplines, yet were identified as being the core activities that are delivered by psychologists.

The top 20 activities performed by each professional group are perceived as mostly generic activities involving significant crossover between the five groups. The activities performed by staff of the public mental health service focus on the physical care of consumers, including medication management and activities related to continuity of care and support activities with external providers. There is a gap in the provision of psychological and psychosocial interventions for most disciplines. Horizontal substitution was most evident between nursing, occupational therapy, psychology and social work. Vertical substitution was most evident between psychiatry and nursing, as well as psychiatry and psychology. Psychiatrists spent the most time engaged in discipline specific activity and the least time on generic activities. This is a significant finding as it suggests that professional groups with impermeable boundaries spend more time in discipline specific activity. Of note is how few discipline specific activities there are for the nursing and allied health professions.

Table 7. 7: The top 20 activities performed by each discipline perceived to require discipline specific skills

[Activities that are perceived to require discipline specific skills as identified by all disciplines are in bold.]

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
1. Clinical Activities – Discipline Specific	**1.One-to-One Nursing Care** **2.Administer PRN Medication** **3.Nurses Meeting** 4. Clozapine Clinic **5. Nursing Ward Rounds** 6. Supervise Consumer Bathing 7. Assist Consumer Washing Clothes 8. Give Medication Oral and IMI **9. Supervise Meal Times**	**1.Living Skills Assessment** 2. Assist Consumer Washing Clothes 3. Supervise Consumer Bathing	**1.Medication Prescribing** **2.Medication Review** **3. Pathology Requests** **4. Review Medical/Blood Results** **5. Patient Medical/Assessment Review** **6. Legal Activity (MHA) Schedules** **7. ccCHIP Referral Form Completion** **8. Psychiatry Review at Home with Registrar** 9. Clozapine Clinic 10. Give Medication Oral and IMI		
2. Both Clinical and Non-clinical Generic Activities	1.Outing with Consumers	1. Outing with Consumers			
3. Non-clinical Generic Activities					

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
4. Clinical Process-Assessment and Formulation			**1.Referrals** 2. Mental Health Assessment 3. Mental State Examination (MSE)	1. Mental Health Assessment 2. Mental State Examination (MSE) **3. Risk Assessment**	**1. Home Visits**
5. Therapy	1.Medication Supervision	**1. Create Food Diary Template** 2. Groups 3. **Encourage Consumer to engage in Social Activity**	1. Medication Supervision 2. Psychological Therapy	**1. DBT Consultation** 2. Psychological Therapy 3. DBT Group **4. Individual therapy** **5. Phone Counselling** **6. Psychoeducation** 7. Groups	**1. Visit Burwood Respite** 2. DBT Group 3. Groups
6. Continuity of Care	1.Liaise with Pharmacy		1. Liaise with Pharmacy **2. Consumer Discharge**		
7. Activities related to External Providers	1.Care-Coodination 2. Assist Consumer with Legal Aid	1.Assist Consumer with Legal Aid 2.Care Coordination 3. Follow-up Housing Forms. 4.Writing Support Letters 5. Financial Management Order Hearing	1. CTO Hearing	1.Financial Management Order Hearing 2. Care Coordination	1. Follow-up Housing Forms. **2. Assist Consumer with Legal Aid** 3. Financial Management Order Hearing 4. Writing Support Letters 5. Care Coordination 6. CTO Hearing
8. Continuity and Support Activities	1. Organise Consumer Belongings 2. Create Repayment	1.Organise Consumer Belongings 2.Assist Consumer with	1. Breach CTO 2. Complete CTO	1. Attend GP Appointment with Consumer	1. Create Repayment Schedule 2. Applications JD,

Category	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work
	Schedule 3. Search for Consumer in Community 4.Attend GP Appointment with Consumer 5. Assist Consumer Clean Room 6. Assist Consumer with Shopping	Shopping 3.Assist Consumer Clean Room 4.Create Repayment Schedule 5. Attend GP Appointment with Consumer 6. Search for Consumer in Community 7. Breach CTO 8. Complete CTO		2. Writing Support Letters 3. Search for Consumer in Community 4. Breach CTO 5. Complete CTO 6. Create Repayment Schedule 7. Serve CTO 8. Organise Consumer Belongings	DoH, DSP 3. Assist Consumer Clean Room 4. Assist Consumer with Shopping 5. Organise Consumer Belongings 6. Attend GP Appointment with Consumer 7. Search for Consumer in Community 8. Breach CTO 9. Serve CTO 10. Complete CTO

7.3.2.2 Skills - Sub-question 2.2: Who does each Discipline Believe should Perform these Activities?

Table 7.8 presents analysis as to which activities should be performed by each disciplinary group in the mental health service. The percentage means that clinicians from all disciplines see this activity as discipline specific. Higher percentages represent greater levels of agreement among staff that the activity is discipline specific. Percentages over 50% are shaded grey indicating agreement among staff that the activity is seen as discipline specific. The highest levels of agreement between staff are for nursing (13) and psychiatry (9) specific activities. The lowest levels of agreement between staff are for occupational therapy (3), psychology (3) and social work (5) specific activities and this is representative of the contested areas. There is some incongruence between the results of Table 7.7, which represents what each discipline identified as discipline specific tasks, and Table 7.8, which represents what all clinicians of the mental health service perceive to be discipline specific tasks. For example, in Table 7.7 nursing specific activities are 5, occupational therapy 3, psychiatry 10, psychology 5 and social work 3. The implications are ambiguity between roles and disharmony about where professional boundaries lie (Brown, Crawford & Darongkamas; Bull, Hargreaves & Shakespeare 2008; Fox 2013). Roles that are clearer and better developed tend to have more defined and explicit boundaries (Nancarrow & Borthwick 2005).

Table 7.9 summarises how each discipline perceives their role and the role of other disciplines, as well as the activities that are the domain of each discipline. There appeared to be a high level of congruence between the five disciplines in terms of their perception of their own role and others perception of their role. Psychiatrists perceived their role to include the psychological care of consumers, as did social workers while other disciplines did not report this. Psychologists saw their role as being concerned with mental health assessments (an umbrella term for psychometric, personality and forensic risk assessments). However, what became evident was the understanding of each other's roles appeared to be superficial and stereotyped. Deeper understanding of the specific activities associated with each professional group was lacking.

Table 7. 8: Top 20 discipline specific activities identified by all disciplines

[Higher percentages represent greater levels of agreement among staff that the activity is discipline specific. Percentages over 50% are shaded grey indicating agreement among staff that the activity is seen as discipline specific.]

Activity Number	**Disciplines N=316**				
	Nursing (%)	**Occupational Therapy (%)**	**Psychiatry (%)**	**Psychology (%)**	**Social Work (%)**
1	Give Medication Oral and IMI (88)	Living Skills Assessment (71)	Medication Prescribing (86)	DBT Consultation (72)	Follow-Up Housing-Other Forms (62)
2	One-to-One Nursing Care (85)	Assist Consumer with Shopping (53)	Medication Review (84)	Psychological Therapy (59)	Assist with Legal Aid (59)
3	Administer PRN Medication (84)	Outing with Consumers (51)	Pathology Requests (83)	DBT Group (57)	Create Repayment Schedule (59)
4	Nurses Meeting (83)	Assist Consumer with Legal Aid (39)	Review Medical/Blood Results (79)	Individual Therapy (39)	Applications JD, DoH, DSP (54)
5	Supervise Consumer Bathing (82)	Assist Consumer Clean Room (37)	Referrals (78)	Phone Counselling (34)	Financial Management Order Hearing (54)
6	Nursing Ward Rounds (81)	Assist Consumer Wash Clothes (33)	Patient Medical Assessment/Review (69)	Financial Management Order Hearing (28)	Assist Consumer Clean Room (46)
7	Assist Consumer Wash Clothes (75)	Create Repayment Schedule (32)	Legal Activity (MHA) Schedules (60)	Psychoeducation (23)	Assist Consumer with Shopping (43)
8	Medication Supervision (68)	Organise Consumer Belongings (32)	ccCHIP Referral Form Completion (53)	Groups (22)	Organise Consumer Belongings (41)
9	Supervise Meal Times (68)	Attend GP Appointment with Consumer (31)	Liaise with Pharmacy (51)	Attend GP Appointment with Consumer (19)	Attend GP Appointment with Consumer (39)

Activity Number	Disciplines N=316				
	Nursing (%)	**Occupational Therapy (%)**	**Psychiatry (%)**	**Psychology (%)**	**Social Work (%)**
10	Clozapine Clinic (59)	Supervise Consumer Bathing (28)	Clozapine Clinic (47)	Care-Coordination (19)	Write Support Letters (34)
11	Liaise with Pharmacy (54)	Create Food Diary Template (27)	CTO Hearing (40)	Write Support Letters (18)	Search for Consumer in Community (33)
12	Outing With Consumers (51)	Groups (27)	Psychiatry Review in Home with Registrar (37)	Mental Health Assessment (17)	Home Visits (28)
13	Organise Consumer Belongings (51)	Care-Coordination (19)	Complete CTO (36)	Mental State Examination (16)	Visit Burwood Respite (28)
14	Create Repayment Schedule (50)	Follow-Up Housing Forms (19)	Medication Supervision (35)	Search for Consumer in Community (15)	Care Coordination (25)
15	Assist Consumer with Legal Aid (50)	Search for Consumer in Community (18)	Mental Health Assessment (33)	Breach CTO (15)	DBT Group (22)
16	Care Co-Ordination (47)	Writing Support Letters (14)	Mental State Examination (32)	Serve CTO (13)	CTO Hearing (21)
17	Assist Consumer Clean Room (45)	Encourage Consumer to Engage in Social Activity (14)	Consumer Discharge (29)	Create Repayment Schedule (13)	Breach CTO (20)
18	Attend GP Appointment with Consumer (44)	Breach CTO (13)	Breach CTO (28)	Risk Assessment (12)	Serve CTO (19)
19	Assist Consumer with Shopping (42)	Financial Management Order Hearing (12)	Give Medication Oral and IMI (28)	Complete CTO (12)	Groups (18)

Activity Number	Disciplines N=316				
	Nursing (%)	**Occupational Therapy (%)**	**Psychiatry (%)**	**Psychology (%)**	**Social Work (%)**
20	Search for Consumer in Community (37)	Complete/Serve CTO (11)	Psychological Therapy (26)	Organise Consumer Belongings (12)	Complete CTO (18)

The key findings were: the activities required in the provision of care to consumers are a combination of discipline specific and generic activities; and, there was imbalance between what clinicians believed their role should be and what activities they should perform, to what they were doing. The recommendation was to ensure good communication and collaboration between staff in order to define roles and responsibilities clearly.

Table 7. 9: The perception of role and activities of each discipline by other disciplines

Discipline	**Discipline Specific Activities** **[There was agreement that the …]**
Nursing	Nursing role was primarily concerned with medication and activities related to the physical care of consumers.
Occupational Therapy	Occupational therapy role was primarily concerned with activities of daily living and the provision of recreational/occupational groups on inpatient units.
Psychiatry	Psychiatry role was primarily concerned with activities involving the psychiatric, medical and legal care of consumers.
Psychology	Psychology role was primarily concerned with the delivery of psychological interventions conducted individually, in groups or by telephone.
Social Work	Social work role was primarily concerned with activities related to advocating for consumers with external providers.

7.3.3 Professional Identity – Theme 3

There were two sub-questions under the third theme, professional identity. The first sub-question was: what is the strength of professional identity of each of the five disciplines? The second sub-question was: what is the relationship between strength of professional identity and discipline specific activities?

7.3.3.1 Professional Identity – Sub-question 3.1: What is the Strength of Professional Identity of Each of the Five Disciplines?

The PIS scores for each discipline across the inpatient and community setting, and the average score is presented in Table 7.10. The numbers represent an average PIS score on a 7- point Likert scale where 1 = Strongly Disagree and 7 = Strongly Agree.

Generally, lower PIS scores were associated with more role blurring between disciplines, although the differences between each discipline on PIS scores were not statistically significant. There is no published literature with which to compare these findings. The strength of professional identity was marginally greater in the inpatient setting for

psychiatry, psychology and social work, while it was marginally stronger in the community setting for occupational therapy and nursing. This may be related to the fact that roles are usually more clearly delineated on inpatient units.

Table 7. 10: PIS scores of each discipline

Discipline	**Setting**		
	Inpatient	**Community**	**Average**
Nursing	4.00	4.22	4.58
Occupational therapy	4.53	4.61	4.54
Psychiatry	4.71	4.22	4.62
Psychology	4.65	4.57	4.48
Social Work	4.63	4.56	4.40

Most participants recognised that lack of role clarity caused confusion and potential for conflict between disciplines. The lack of role clarity also made many clinicians express concerns about professional identity. They were concerned that consumers could not recognise which professional group they belonged on community teams. They reported that greater role clarity was required between the professional groups in the public mental health service.

7.3.3.2 Professional Identity – Sub-question 3.2: What is the Relationship between Strength of Professional Identity and Discipline Specific Activities?

Overall, there was a positive relationship (r=0.230, n=320, p=<.0001) between professional identity and discipline specific activities. The relationship between professional identity and discipline specific activities was weakest for nurses and strongest for social workers. This suggests that the more time clinicians spend using their discipline specific skills, the greater is their sense of professional identity, their connection and sense of belonging to a particular disciplinary group. The relationship between professional identity and time spent on discipline specific activities for each discipline is presented in Table 7.11. Discipline specific activities are measured in percentage of time spent by clinicians on these activities in an average week.

Table 7. 11: The relationship between PI and DSA

Discipline	Correlation between PIS and DSA Pearson Correlation Coefficient (r)	Statistically Significant
Nursing	0.14	No
Occupational Therapy	0.19	No
Psychiatry	0.27	Yes
Psychology	0.24	No
Social Work	0.37	Yes

Pearson correlation coefficients are reported from 0 to ± 1.00 A perfect, positive correlation is +1.00 and means there is a very strong relationship between two variables of interest and that as one variable increases so does the other. Correlations that approach 1.00 indicate a stronger relationship between two variables (Bryman 2015). These findings suggest that time spent on discipline specific activities strengthens professional identity. However, time spent delivering discipline specific activities is only one factor that contributes to professional identity and these results confirm that professional identity is a multi-factorial construct.

The key finding here was: the role of each disciplinary group is determined by belonging to, or membership of a tribe, together with the activities that are performed by that tribe. The recommendation was: for greater role clarity, which could be achieved through the development of competency frameworks for different settings.

7.3.4 Power – Theme 4

There were two sub-questions under the fourth theme, power. The first sub-question was: what is the interaction between professional identity, discipline specific activities and power? The second sub-question was: what effect does this interaction have on the provision of care to consumers of the public mental health service?

7.3.4.1 Power – Sub-question 4.1: What is the Interaction between Professional Identity, Discipline Specific Activities and Power?

Overall, there was a positive relationship between professional identity and power ($r=0.38$, $n=320$, $p <.0001$). There was also a positive relationship between discipline specific activities and power ($r=0.42$, $n=320$, $p <.0001$).

Disciplines that perceived themselves to have more power and spent more time delivering discipline specific activities reported a stronger professional identity. These results confirm the covariance of the relationship between discipline specific activity, power and professional identity. When one of these variables increases, the others follow. Therefore, a discipline that wishes to increase strength of professional identity among its clinicians needs to increase the amount of time they spend delivering discipline specific activities. When this happens, the clinicians start to feel more powerful. Similarly, the more power a disciplinary group has, the stronger are its boundaries and the more time its clinicians can spend delivering discipline specific activity. This in turn strengthens professional identity. Table 7.11 ranks disciplines on time spent on discipline specific activities, generic activities, professional identity and power.

Of note, psychiatrists who spent the most time on average in discipline specific activity, the least time on generic activity, reported the strongest sense of professional identity and were perceived to be the most powerful professional group in the mental health service.

Table 7. 12: Ranking disciplines on DSA, GA, PI and POW

Discipline	**Rankings**			
	Mean percentage Time on Discipline Specific Activities (DSA)	**Mean percentage Time on Generic Activity (GA)**	**Mean Strength of Professional Identity (PI)**	**Mean Power (POW)**
Nursing	5	2	2	2
Occupational Therapy	4	5	3	5
Psychiatry	1	1	1	1
Psychology	2	3	4	3
Social Work	3	4	5	4

7.3.4.2 Power – Sub-question 4.2: What Effect does this Interaction have on the Provision of Care to Consumers of the Public Mental Health Service?

Figure 7.3 summarises the results to this question by first addressing the consumer needs that are being met, second, the consumer needs not being met, and third what changes are required by public mental health services.

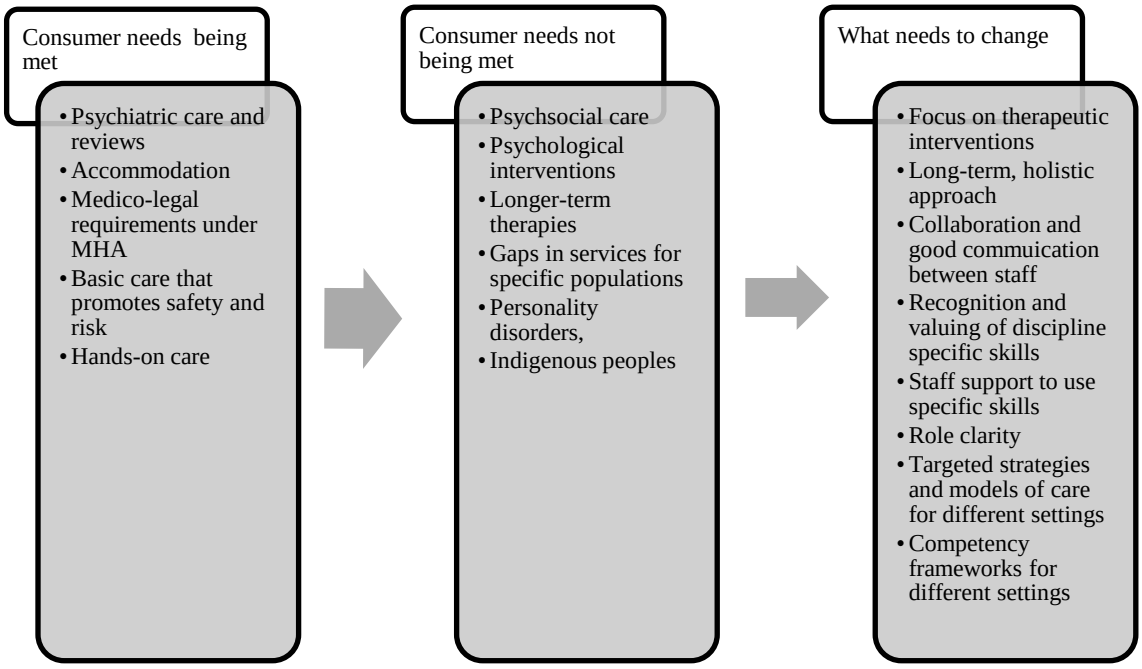


Figure 7. 3: Consumer needs

To ensure a holistic, collaborative and integrated approach to the provision of care change is required (Buykx et al. 2010; Grace et al 2017; Kazdin 2017). These changes include: a holistic and long-term approach to care with a focus on therapeutic interventions; the recognition and valuing of discipline specific skills, greater use of discipline specific skills; role clarity that can be achieved with the use of competency frameworks and models of care for different settings; and, collaboration and good communication between staff.

The effect that these power relationships have on the provision of care to consumers of public mental health services is that the more power a discipline possesses, the more it is able to protect its professional boundaries from others. By doing so, certain activities become excusive to that discipline and only that discipline can deliver those activities. If no other discipline can deliver those activities, in providing care to consumers, then that discipline will inevitably spend more time delivering discipline specific activities. Powerful disciplines are

able to use their skills in meeting consumer needs while less powerful disciplines are less likely to be able to use their discipline specific skills in meetings consumer needs. This in turn reinforces the power gradient between disciplines in public mental health services. Similarly, professional identity is strengthened the more time a discipline can spend in delivering care that uses discipline specific activities such as prescribing, monitoring physical health or delivering CBT or other type of psychotherapy. Despite the move towards interprofessional teams, the medical dominance model prevails and with it power associated with the medical profession.

The key findings here were: the more power a disciplinary group possesses, the more time that group can spend delivering discipline specific activities. The more that each disciplinary group can secure its discipline specific activities from intrusion by others, the more time it will spend on them (Cameron 2011). The recommendations were a holistic, collaborative and integrated model of care was required; with a greater focus on long-term therapeutic interventions; as well as targeted strategies and models of care for different workplace settings.

7.4 Building a New Model of Professional Identity

The study tested three hypotheses (Table 7.13). The analysis and implications are discussed in this section.

Table 7. 13: Hypotheses

Hypothesis	
H 1.	Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.
H 2.	Strength of professional identity will have a positive relationship with power.
H 3.	There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

The strengths of the 4FM-PI in addressing the question of the role of allied health professionals in the future of public mental health services include, recognition that stronger professional identity is associated with better outcomes for consumers and a more engaged and empowered clinical workforce. The limitation of the model is that recognition of the importance of power and activities to strengthening professional identity does not inherently change the status quo. Assertive strategies are required to address the imbalance of power

between disciplinary groups as well as changes to the current models of care. Such changes require the implementation of a change management process with strong executive support.

7.4.1 Hypothesis 1

It was hypothesised that the strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities. This emerged from the understanding that professional identity was originally conceptualised as comprising two factors, *belonging* and *attachment* (Figure 7.4).

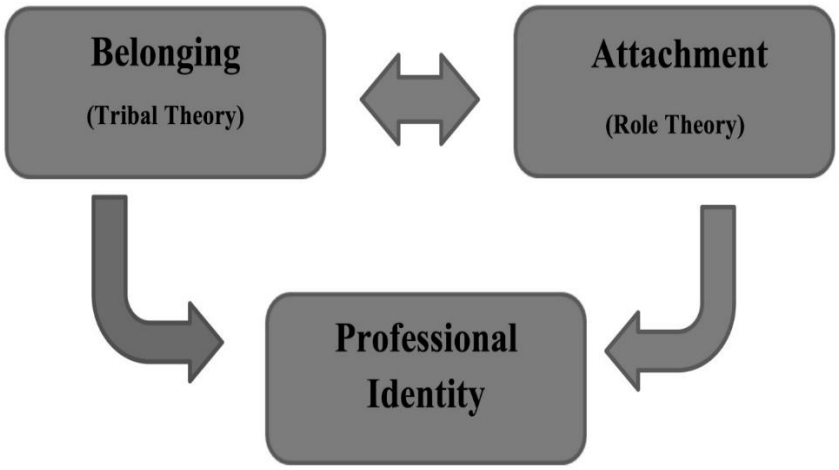


Figure 7. 4: The original two-factor model of Professional Identity

The findings from Chapter Five have shown that increases in strength of professional identity were correlated with increases in time spent on discipline specific activities, i.e. time leads to belonging and attachment through activities. This result was statistically significant for psychiatry and social work. Even though not statistically significant for nursing, occupational therapy and psychology, the results were in the predicted direction. Discipline specific activities distinguish one professional group from other groups (Chreim, Williams & Hinings 2007). The discipline specific activities performed by one professional group determine that group's role (Goodrick & Reay 2010). Therefore, it follows that more time spent performing discipline specific activities is connected with a stronger sense of professional identity. Hence, hypothesis 1 could be accepted.

This result supports the addition of *activities* as one of the four factors in the *4FM-PI*. Figure 7.5 demonstrates the addition of *activities* as the third factor in a four-factor model of PI.

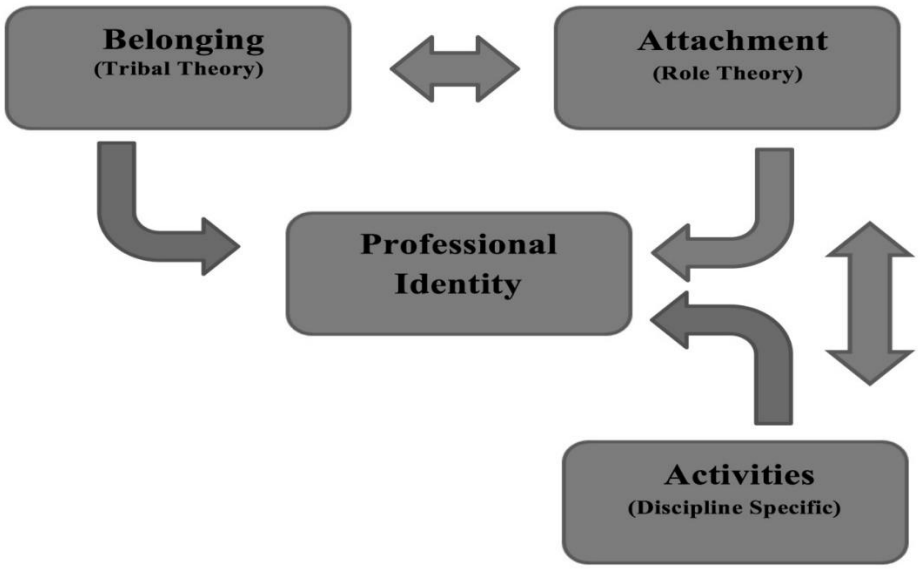


Figure 7. 5: Building a multi-factorial model of Professional Identity

7.4.2 Hypothesis 2

The second hypothesis was that the strength of professional identity will have a positive relationship with power. Increases in strength of professional identity were correlated with increases in power. This relationship was statistically significant for all professional groups other than occupational therapy where the result was in the predicted direction. These results confirm that there are many components to professional identity (Barbour & Lammers 2015) and that *power* is one of the most salient components. Hence, the second hypothesis could also be accepted. This supports the addition of *power* as the fourth factor in the *4FM-PI*. Furthermore, this finding confirms the expansion of the professional identity concept, and the development through the empirical testing of the *4FM-PI* (Figure 7.6). The relationship between the eight sub-questions and three hypotheses that were tested are mapped onto the 4FM-PI (Figure 7.6).

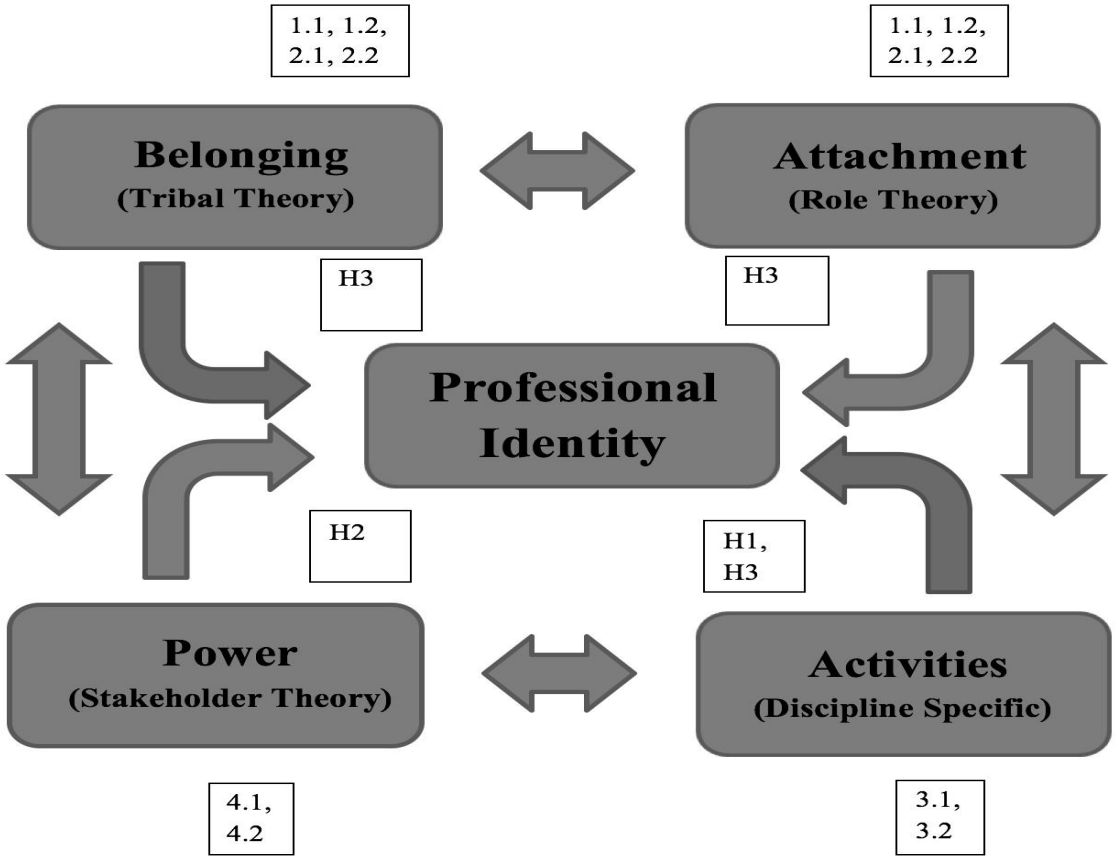


Figure 7. 6: The four-factor model of Professional Identity (4FM-PI)

7.4.3 Hypothesis 3

The third hypothesis was there would be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines. There was no clear pattern in strength of professional identity and power between inpatient and community staff across the five disciplines. The only statistically significant difference was on strength of professional identity between community and inpatient psychologists; community psychologists reported stronger professional identity scores. Of note was that community psychiatrists reported stronger PIS scores than inpatient psychiatrists, even though the difference was not statistically significant. For nurses, occupational therapists, and social workers PIS scores were higher on inpatient units than on community teams, but the difference was not statistically significant.

While there is evidence of nurses, occupational therapists and social workers on community mental health teams feeling deskilled there is an absence of literature exploring this issue with psychologists and psychiatrists (Brown Crawford & Darongkamas 2001; Bull,

Hargreaves & Shakespeare 2008; Frost, Robinson & Anning 2005). A possible explanation is that faced with generic roles they have attempted to differentiate themselves from the other professional groups by adhering to psychology and psychiatry specific activities (Brown, Crawford & Darongkamas 2001). Hence, the third hypothesis could not be accepted. However, the result does not change the 4FM-PI. Professional identity is a multi-factorial construct that is strengthened through *belonging*, *attachment*, *power* and *activities*.

7.5 The Nexus between Contested Roles and Negotiated Order – Relationship to Professional Identity and Patient Care

The aim of this research was to answer the overarching question: *what is the role of allied health in the future of public mental health services?* In order to do so, the research explored the nexus between activities, skills, professional identity and power. The research examined how the interplay between these four themes promoted contested roles and a negotiated order between the five largest disciplinary groups in the public mental health service, and how that has impacted on the delivery of consumer care. The seven key findings from this study are discussed below (Table 7.14).

Table 7. 14: Key research findings

Number	Finding
1	The role of each disciplinary group is determined by belonging to, or membership of a tribe, together with the activities that are performed by that tribe.
2	The activities required in the provision of care to consumers are a combination of discipline specific and generic activities.
3	The more power a disciplinary group possesses, the more time that group can spend delivering discipline specific activities.
4	Organisational setting or location shapes and influences how much time each disciplinary group spends on discipline specific and generic activities.
5	The more that each disciplinary group can secure its discipline specific activities from intrusion by others, the more time it will spend on them.
6	There was imbalance between what clinicians believed their role should be and what activities they should perform, to what they were doing.
7	To ensure a holistic, collaborative and integrated approach to the provision of care change is required.

7.5.1 Key Finding One: Role, Belonging and Activities are Interrelated

Key Finding: The role of each disciplinary group is determined by belonging to, or membership of a tribe, together with the activities that are performed by that tribe.

The specific activities performed by each discipline define their role (Chreim, Williams & Hinings 2007). These discipline specific activities are protected against intrusions and invasion from others because they are held to be the tribe's territory and differentiate one disciplinary group from others (Brookes et al. 2007). Role is also dependent on a number of internal and external factors such as, location, culture and staffing (Reay et al 2017, Stryker & Serpe 1982; Wilberforce et al. 2017) (Figure 7.7). Other factors that also contribute to this outcome include policies, financial decisions, human resource practices and consumer pressure (Brookes et al. 2007; Cameron 2011).

Figure 7. 7: Factors that determine professional role

The professional groups in healthcare have been described as members of different tribes (Mandy, Milton & Mandy 2004; Weller, Boyd & Cumin 2014). As a tribe, each disciplinary group strives to protect its professional territory from encroachment, intrusion and colonisation by others (King et al. 2015; McGee-Cooper 2005). The demarcation of boundaries between professional groups has resulted in interprofessional rivalry and stereotypes, but also collaboration and teamwork.

This study confirmed that through a process of professional socialisation members of professional groups, like tribes adopt the norms, values and stereotypes held by other members of that particular professional group (Hean et al. 2006; Mann et al. 2005). This was evidenced by the fact that each disciplinary group had a superficial and stereotyped view of the others. Out of the top ten activities performed by each discipline, participants were only able to identify one discipline specific activity for occupational therapists, two for social workers, four for psychologists, five for nurses and eight for psychiatrists.

Tribal belonging and attachment, or professional identity, becomes strengthened when an individual is placed in a work setting that allows for greater contact with other tribal members and roles have been clearly defined. Such a setting is clearly found on inpatient units. Conversely, professional identity weakens when there is less contact with other tribal members and roles are blurred. Settings, such as community teams, are environments that present these challenging conditions. Higher professional identity was linked with decreased role blurring, while lower PIS scores were associated with increased role blurring between disciplines; although this relationship was not statistically significant (Figure 7.8).

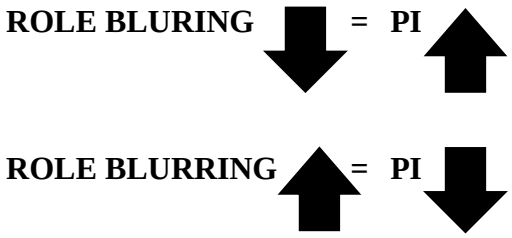


Figure 7. 8: The relationship between role blurring and PI

Clinicians on community teams also reported tension between allegiance and loyalty to their disciplinary tribe and the multidisciplinary team, as has previously been recorded (Brown, Crawford & Darongkamas 2001; Carpenter et al 20003; Chesters & Burley 2011). They were uncertain to which group they owed loyalty. For example, if clinicians accepted that all members of the multidisciplinary team were the same, and therefore could perform the same activities in delivering consumer services, this created a sense of disquiet and betrayal of their disciplinary tribe. This tension was further exacerbated by clinicians feeling disempowered

and unable to discuss their sense of disquiet openly. This situation, in turn, resulted in clinicians feeling deskilled and perceiving that their discipline specific skills were devalued. They were concerned that if staff and consumers were not able to identify to which disciplinary group a clinician belonged, then their sense of professional identity was at risk and they felt disempowered (McNeil. Mitchell & Parker 2014).

Members of a professional group are said to strongly identify with their group and perceive other groups as significantly different (Sluss & Ashforth 2007). This finding was evident in the study. Nurses tended to see occupational therapists as most like them because they were "hands on" and psychologists least like them because "they don't touch patients." Psychiatrists nominated psychologists as most like them and nurses as least like them. Psychologists reciprocated nominating psychiatrists most like them and nurses least like them. Occupational therapists nominated nurses (share most tasks) and psychologists (we deal with cognition) as most like them and psychiatrists as least like them. Social workers nominated psychologists (counselling and therapy) and occupational therapists (shared activities, e.g. shopping, accommodation, and finances) as most like them and psychiatrists as least like them (medical model versus strengths-based model). Tension was most evident between groups that saw themselves as least similar.

Sharing a similar theoretical background and training in particular theories of mental illness were identified as factors that contributed to a feeling of closeness or similarity by the five disciplines (Turner 1999). However, such similarity is also known to encourage horizontal substitution and the results here provided further evidence of this (Nancarrow & Borthwick 2005). Participants also reported that there was crossover in activities between disciplines largely due to resourcing and team structures (Nancarrow & Borthwick 2005).

Conversely, working from a dissimilar theoretical background was identified as a source of tension and point of difference (Carpenter & Barnes 2001). Again, this confirmed previous findings that suggest that barriers to interprofessional collaboration include different training, philosophies, culture and models of care (Clark & Drinka 2016; Currie & White 2012; Niezen & Mathijssen 2014). Overall, more crossover of activities occurred between disciplines that saw themselves as being alike, such as nursing and occupational therapy, and social work and occupational therapy. Less crossover of activities occurred between disciplines that saw themselves as least similar, such as psychiatry and occupational therapy

or social work. These results support the concept that horizontal substitution is more likely to occur between disciplines with similar levels of training, values and theoretical perspectives (Brookes et al. 2007). This of course means that conflict and tension between these disciplines is likely to continue unless roles become more clearly defined and discipline specific activities regulated through legislation, competency frameworks or credentialing processes.

7.5.2 Key Finding Two: Professionalism is a Combination of Discipline Specific and Generic Activities

Key Finding: The activities required in the provision of care to consumers are a combination of discipline specific and generic activities.

Professional groups distinguish themselves from each other by their role and the activities they perform (Timmons & East 2011). These activities are both generic and discipline specific. When a professional group performs more generic activities than discipline specific activities, role conflict and role ambiguity ensue, and it becomes more difficult for that group to distinguish itself from the other professional groups (Brookes et al. 2007). This then encourages boundary violations and professional identity threat. While these results are consistent with previous findings they add to the literature by including all five disciplines in mental health services. Previous studies have mainly explored the impact of role blurring in mental health services on nurses, occupational therapists and social workers (Brown, Crawford & Darongkamas 2001; Brown et al. 2011; Cameron 2011; Carpenter et al. 2003; Corney 1999; Frost, Robinson & Anning 2005; Lloyd, King & McKenna 2004). This study furthers our understanding of the impact of role blurring on psychiatrists and psychologists in mental health services and is a unique empirical study to explore this issue with these two disciplines.

Discipline specific and generic activities were identified as eight categories. More broadly, however, they include clinical activities that have discipline specific content for each profession such as medication prescribing, living skills assessments and nursing ward rounds. The generic clinical activities that are performed by all disciplines include mental state assessments, report writing and groups. They also include non-clinical activities that are generic such as administrative tasks and mandatory training. Professional identity is strengthened when a disciplinary group spends more time performing discipline specific

activities. Conversely, professional identity is diluted as time spent performing generic activities increases. These results were not unexpected given that positions on community teams are multi-graded (Brown, Crawford & Darongkamas 2000; Fox 2013). This relationship between activities and professional identity is summarised in Figure 7.9.

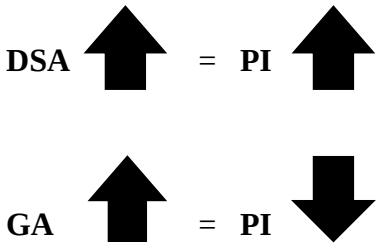


Figure 7. 9: The relationship between activities and PI

Psychiatrists spent the most time engaged in discipline specific activities and the least time engaged in generic activities, that is, 59% and 27%, respectively. Psychologists spent about 53% of their time engaged in discipline specific activities. Nurses, occupational therapists and social workers spent on average less than 50% of their time engaged in discipline specific activities. These findings confirm horizontal substitution and blurred boundaries are most common among nurses, occupational therapists, social workers and psychologists (Nancarrow & Borthwick 2005). Professional groups with high disciplinary framing tend to have stronger professional boundaries and are therefore able to spend more time engaged in discipline specific activities (Becher & Trowler 1996). This was confirmed in this study in that psychiatrists who have the highest levels of disciplinary framing of all disciplines, spent the least amount of time engaged in generic activities. However, while psychologists were concerned about their discipline specific skills being poached by other groups, the other disciplines perceived psychologists to have higher disciplinary framing and stronger professional boundaries than themselves.

The role of each professional group in the mental health service was defined by the activities performed by that group. The majority of participants expressed concern that most of the activities they performed were task oriented and this did not allow them to use their discipline specific skills. Working on community teams, where there was a lack of role clarity, clinicians felt their discipline specific skills were not valued or respected. Clinicians, particularly on community teams expressed fears of being deskilled (Carpenter et al. 2003; Cleary 2003; Fox 2013; Frost, Robinson & Anning 2005; Lloyd, King & McKenna 2004). Certainly, this has been found to be the case in others studies (Clavering & McLaughlin

2007; Corney 1999; Edwards & Direttte 2010; McNeil, Mitchell & Parker 2014). Previous research has shown that role conflict on multidisciplinary community mental health teams is associated with increased levels of stress and lower levels of job satisfaction (Carpenter et al. 2003). While this study did not measure job satisfaction, it seems logical to conclude that clinicians who feel devalued and whose training and skills are underutilised may struggle to enjoy their work.

A focus on generic activity resulted in blurred boundaries, tension and the appearance of faultlines between the professional groups. These faultlines occurred in the area of psychosocial and psychological interventions. However, blurred boundaries occurred on inpatient units as well as community teams. Clinicians reported that culture, resourcing, team composition and skill-mix contributed to role blurring. They reported that individual skills and experience could contribute to role blurring. Clinicians were surprised at the superficial understanding they had of the training and skills of professional groups other than their own. This study strengthens previous findings that clinicians do not know much about the role and training of other disciplines and when to refer to them (McGrath et al. 2011; Page & Meerabeau 2004)).

7.5.3 Key Finding Three: The Significance of Power

Key Finding: The more power a disciplinary group possesses, the more time that group can spend delivering discipline specific activities.

This finding confirms that exclusivity and power are connected. Impermeable boundaries safeguard discipline specific skills, increase occupational power and status, and strengthen professional identity. These findings confirm a four-factor model of professional identity. The more power a disciplinary group possesses, the more time that group can spend delivering discipline specific activities. Conversely, the less power a disciplinary group possesses, the more time it spends delivering generic activities. Participants identified that authority came from the medical model operating within public mental health services. This model invariably favours psychiatrists with power and therefore decision-making capacity (Leonard 2003). A very clear hierarchy emerged with psychiatry at the top and the other four disciplines jostling for power underneath (Timmons & East 2011). Clinical governance processes, culture, expectations and physical environment reinforced the hierarchy between psychiatry and the other disciplines (Weaver et al. 2011). Again, these results suggest very little has changed within the hospital system in terms of power gradients. The results in this

study confirm previous findings, that irrespective of clinical stream, the doctors' role is dominant (Nugus et al. 2010). Other factors that could influence the amount of authority held by members of the other four disciplines were personality attributes and role in the organisation. Nurses benefitted most from the latter.

The interrelationship between power and activities is presented in Figure 7.10. Thus, more power is equated with more time spent on disciplinary specific activity, which in turn strengthens professional identity. This increase in professional identity then increases the disciplinary group's power. The relationship between power, discipline specific activities and professional identity is presented in Figure 7.11.

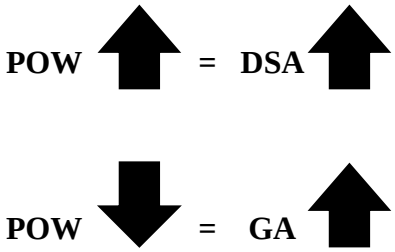


Figure 7. 10: The relationship between power and activities

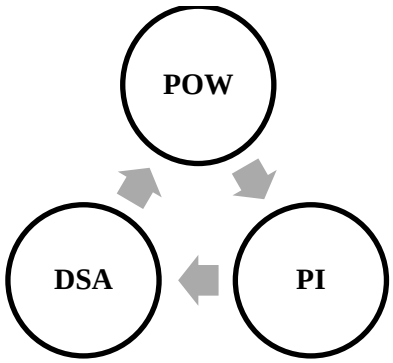


Figure 7. 11: The relationship between power, discipline specific activities and professional identity

As a group, psychiatrists were perceived by the other groups as having the most power. Psychiatrists also reported the strongest sense of professional identity and had the most impermeable professional boundaries. They spent the most time performing discipline specific activities and the least time performing generic activities. Registration and credentialing can serve as a strong barrier to entry (Nancarrow & Borthwick 2005). There is a long history about the efforts by various professional groups to secure regulatory and

legislative processes necessitating registration and credentialing, which in turn helps preserve interprofessional boundaries (Cregard 2018). Doctors have been most effective at using regulatory and legislative processes to secure their professional boundaries. Registration serves as a widely recognised signal of membership and identity, both to those with registration/credentials and those who do not possess it. It should be noted that boundary crossing is confounded by who is and who is not registered to do certain tasks. Registration and credentialing enables the maintenance of impermeable boundaries.

These results confirm previous studies about the powerful position doctors hold in health services (Atwal & Caldwell 2005; Baldwin 2007; Clark 1997; Sauer 2015). It is noted that only psychiatrists reported leadership as being part of their role. Psychiatrists saw themselves as having a leadership role on teams, units and in the mental health service in general (Molleman & Rink 2015). Participants from all five disciplines were unanimous in identifying leadership as part of the role of psychiatrists and this view did not appear to be challenged by members of the other disciplines. Previous research has find nurses are most likely to challenge doctors for power and leadership roles in healthcare organisations (Apker, Prop & Zabava Ford 2005; Page & Meerabeau 2004; Schofield 2009; Wand et al. 2015; Willis 2006).

Leadership, power and authority were seen as inextricably bound. The hospital structure and pre-eminence of the medical model provided psychiatrists with power, authority and leadership over the other disciplines (Timmons & East 2011). However, differences were identified between the personal power accorded psychiatrists via the medical model and the collective power of nurses. The mental health service employed 54% nursing staff and only 12% psychiatrists. Again, the results of this study confirmed that psychiatrists and then nurses are the most powerful professional groups in the public mental health service. The struggle for power is largely between these two groups and remains so (Apker, Prop & Zabava Ford 2005; Carpenter 1995). While psychiatrists maintained leadership, authority and power in clinical decision-making, nurses had the upper hand in operational decisions and resource allocation. This was similar to previous findings and confirmed that little has changed (Gilmour & Huntington 2017; Helmich et al. 2012; Larkin 1983; Leonard 2003; Willis, 1983).

What was surprising is that allied health disciplines accepted this status quo without demur and did not appear to challenge it in this study. Allied health professional groups were not

perceived as having leadership roles, individual or collective power. This suggests that allied health is yet to emerge from the shadow of medicine and nursing (Boyce 2006). Despite there being calls for greater recognition of the skills and untapped potential of the allied health workforce, the status quo remains (Phillip 2015). The role of allied health is still undervalued and each disciplinary group's specific skills are underutilised (McGrath et al. 2011; Philip 2015). While the allied health professional groups remain disempowered, this is unlikely to change.

When groups see themselves as performing similar activities, the less powerful groups can attempt to elevate their status by taking on activities that were once the exclusive domain of the more powerful groups (Hughes 1958). Doing so extends the scope of practice of the less powerful groups thereby increasing their power and strengthening professional identity (Nancarrow & Borthwick 2005). This is vertical substitution. Examples of vertical substitution in public mental health services include nurse practitioner roles with prescribing rights (Appel & Malcom 2002; Gall 2017; Wand et al. 2015) and accredited persons with rights to schedule consumers (Morriss 2015). However, the more powerful group tends to control the degree of vertical substitution. There were examples of vertical substitution in this research between psychiatrists and nurses in relation to dispensing and prescribing medication, as well as psychiatrists and psychologists in relation to psychological therapies. However, as with previous findings, the more powerful group, the psychiatrists, controlled the degree of vertical substitution. They did so by controlling clinical decision making and thus delegating certain aspects of their role, medication prescribing and psychotherapy to nurses and psychologists respectively.

7.5.4 Key Finding Four: Organisational Setting Matters

Key Finding: Organisational setting or location shapes and influences how much time each disciplinary group spends on discipline specific and generic activities.

There was more role differentiation on inpatient units than on community teams. Factors, such as location, culture, resourcing, team composition and skill-mix (Brookes et al. 2007), impacted and shaped the role of each disciplinary group on both inpatient units and community teams. Activities that were protected by legislation, regulation, policy and standards were more likely to remain discipline specific and were controlled by the most powerful professional groups, i.e. psychiatry and nursing. Poaching of discipline specific activities was more likely to occur: on multidisciplinary teams where clinician roles are

similar; where there is lack of role clarity; and, where tasks are unregulated and do not require use of restricted technology (Nancarrow & Borthwick 2005). This was evident on both community and inpatient teams in the public mental health service. There was more role blurring between the five professional groups on community teams. This was expected since positions on community teams are multi-graded and can be filled by a number of different professions. Clinicians reported role blurring led to deskilling and an inability to differentiate each professional group from the others. Crossover in activities between disciplines had an impact on their sense of professional identity with many participants struggling to explain what they did and how to differentiate their discipline from the other disciplines in the public mental health service. Most disciplines expressed concern about the impact of too much crossover on professional identity and there was disagreement and tension between disciplines in what they identified as being discipline specific activities. This unique study provides empirical evidence of this disagreement and tension and is therefore an important contribution to the literature.

The role of the professional groups in the public mental health service is determined by external systems and the structures imposed by the healthcare system (Nancarrow & Borthwick 2005). Resource allocation and funding, Ministry of Health policies and human resource practices have created the challenging environmental conditions in public mental health services. A net result being where care coordination and multi-graded positions have encouraged blurred boundaries and horizontal substitution between the disciplinary groups (Brown, Crawford & Darongkamas 2001; Cameron 2011). External factors, that were outside the control of each disciplinary group, exerted a more significant and powerful impact on role and professional identity than internal factors. This is consistent with previous study findings (Brown et al. 2011; Colyer 2004; Fox 2013; Nancarrow & Borthwick 2005).

Organisational setting, or location, shapes and influences how much time each disciplinary group spends on discipline specific and generic activities. The relationship between location and discipline specific activities is presented in Figure 7.12.

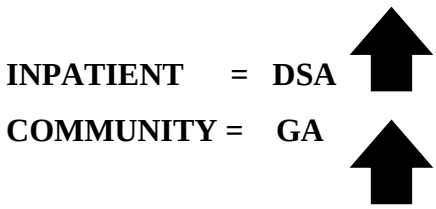


Figure 7. 12: The relationship between location and discipline specific activities

It was evident that clinicians from all disciplines, other than nursing, spent more time delivering discipline specific activities on inpatient units that on community teams. Nursing and occupational therapy roles are more defined on inpatient units: nurses attend to the physical care of consumers and supervise medication; and occupational therapists offer cooking, walking, recreational and psychoeducational groups. Whereas, on community teams, both of these disciplines conduct mental state assessments, respond to crises, manage consumers under CTOs and have opportunity to manage teams. These activities may be perceived as vertical substitution by these disciplines and thereby elevate their status (Morriss 2015).

The greatest difference in strength of professional identity between inpatient and community settings was for psychiatry. This finding was unexpected and a new contribution to the literature that requires further investigation. An explanation for this may be that the hospital hierarchy is more evident on inpatient units, than on community teams that tend to have flatter hierarchical structures (Timmons & East 2011). Professional identity of psychiatrists employed in public mental health services has not previously been explored or measured.

7.5.5 Key Finding: Identity is Reinforced by and, in turn, Reinforces Discipline Specific Activities.

Key Finding: The more that each disciplinary group can secure its discipline specific activities from intrusion by others, the more time it will spend on them.

The more regulated a discipline is, the more impermeable are its boundaries (Becher & Trowler 1996). Impermeable boundaries mean that discipline specific activities are tightly controlled and protected. They cannot be encroached on, adopted or annexed by others (Turnbull et al. 2009). The strength of disciplinary boundaries varies across each discipline. Some boundaries are tightly controlled while others are not (Baldwin 2007). Psychiatry has the most tightly controlled boundaries of the disciplines working in mental health. This is because psychiatry is a convergent and tightly knit profession with high disciplinary framing (Becher & Trowler 1996). A professional group that controls its boundaries becomes the only professional group with the right to perform certain activities, for example, psychiatrists and prescribing right (Clavering & McLaughlin 2007). Therefore, professional identity is strengthened when there is role clarity between professional groups. This was supported by the results of this study with psychiatrists, who have strong boundaries and high disciplinary framing, having the strongest professional identity. Social workers, who have weaker

professional boundaries and lower disciplinary framing, had the lowest professional identity. This study is a unique investigation that has measured and compared professional identity across the five largest professional groups in public mental health services. This study also provides empirical validation for the conceptual work on the relationship between disciplinary framing, boundaries and professional identity.

Hence the key finding that the more that each disciplinary group can secure its discipline specific activities from intrusion by others, the more time it will spend on them, regardless of setting. Disciplines with the strongest boundaries, such as psychiatry and nursing, have more of their activities protected through legislative and regulatory mechanisms. By doing so, they get to spend more time delivering discipline specific activities because other disciplines are prevented from usurping these activities. Disciplines with strongly protected boundaries, such as psychiatry, spend more time delivering discipline specific activities. Conversely, disciplines with weaker boundaries, such as social work and occupational therapy, spend more time delivering generic activities. This suggests that if disciplinary groups want to practice the skills they have been trained in, then they need to strengthen and protect their discipline specific skills through legislation, regulation or accreditation and competency frameworks. Figure 7.13 presents the relationship between boundaries and time spent on discipline specific activities.

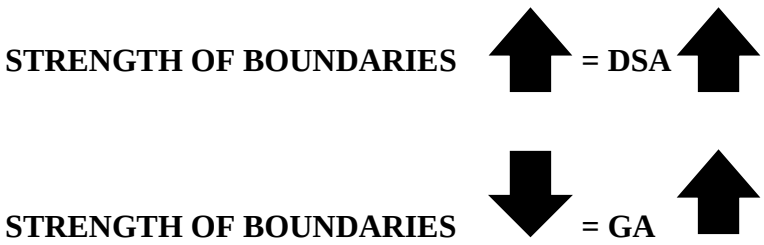


Figure 7. 13: The relationship between strength of professional boundaries and time spent on discipline specific activities

There is a long history of different professional groups attempting to establish their professional status and developing professionalising strategies (Abbott 2014). Some of these strategies have included the use of regulatory and legislative processes to determine entry and monopoly over activities as well as entry into bodies of theoretical study (Nancarrow & Borthwick 2006; King et al. 2018). Other strategies have included establishment of codes of moral behaviour such as codes of ethics and codes of conduct to guide professional practice

as well as protect members of the public from unprofessional conduct or professional misconduct. The acquisitions of technical skills that are protected again through regulation or legislation have also been used by different professional groups to maintain dominance and exclude others. The development of areas of expertise have been rewarded with higher status, greater autonomy and financial remuneration and used by professional groups to elevate their status. Similarly, the establishment of bodies such as Councils, Boards, and Colleges charged with the responsibility for regulation and governance, determining competencies, credentials, accreditation processes and defining scopes of practice are all professionalising strategies used by different professional groups to establish and increase their professional status (Abbott 2014; Cregard 2018).

The possibility of horizontal substitution is likely when activities are poorly defined, unregulated and do not need specialised technology (Nancarrow & Borthwick 2005). These tasks are the psychosocial and psychological interventions. Currently training and competency in any of the psychological interventions, or therapies, is not protected through regulation. A pharmacist, orthoptist or speech pathologist can deliver CBT irrespective of their level of training or expertise in this therapeutic modality. Poaching across disciplinary borders contributes significantly to blurred boundaries and competitive strategies between the disciplinary groups (Becher & Trowler 1996). Horizontal substitution was most evident between nursing, occupational therapy, psychology and social work.

Vertical substitution was most evident between psychiatry and nursing, as well as psychiatry and psychology. Psychiatrists spent the most time engaged in discipline specific activity and the least time on generic activities. This is a significant finding. It suggests that professional groups with impermeable boundaries spend more time delivering discipline specific activities. This is turn leads to a stronger sense of professional identity. This finding is evidence for the reconceptualisation of professional identity as a multi-factorial construct in which power and activities are integral factors (Barbour & Lammers 2015; Eason et al 2018; Kyratsis et al. 2017). The results support the 4FM-PI developed in this study. This is a major addition to the theoretical and empirical literature on professional identity.

7.5.6 Key Finding Six: The Imbalance between Who I am and What I Do

Key Finding: There was imbalance between what clinicians believed their role should be, and what activities they should perform, to what they were doing.

There was broad agreement among public mental health staff about what each professional group should be doing, that is, about the role of each disciplinary group and what the activities within that role should be. However, what caused intradisciplinary imbalance was the difference between what activities clinicians believed they should be delivering and what they actually were doing. There was a disconnect between what clinicians believed their role should be and what activities they should perform to what they were doing.

Additionally, there was congruence between the five disciplines in terms of their own perception and others perception of their role. However, the understanding of each other's roles continues to be superficial and stereotyped with each group only being able to identify one or two activities that they perceived to be discipline specific (Carpenter 1995). Each discipline reported that they did not really understand either the role or breadth of discipline specific activities that could be delivered by the other disciplinary groups in the mental health service. There was interdisciplinary imbalance about what different professions perceived that other disciplinary groups should do and what they actually did. This was consistent with previous findings (Corney 1999; McGrath et al. 2011). Deeper understanding of the specific activities associated with each professional group was lacking (McGrath et al. 2011). This was most apparent for the allied health professional groups in this study and supported previous findings (Frost Robinson & Anning 2005; Lloyd, King & McKenna 2004; Nathan & Webber 2010). There is still much work to do in understanding each other's roles and the contribution of each discipline in meeting the full range of consumer needs. Crossover in activities between disciplines had an impact on their sense of professional identity with some participants struggling to explain what they did and how to differentiate their discipline from the other disciplines in the public mental health service. This study is a unique exploration of the impact of activities crossover on professional identity for clinicians in public mental health services. The performed and perceived imbalances are illustrated in Figures 7.14 and 7.15.

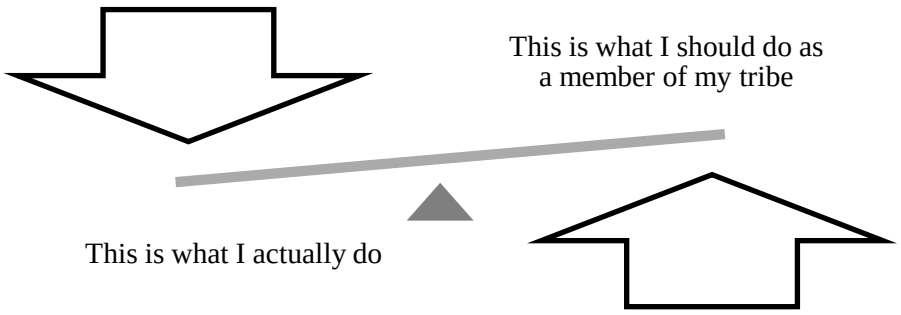


Figure 7. 14: Intradisciplinary imbalance

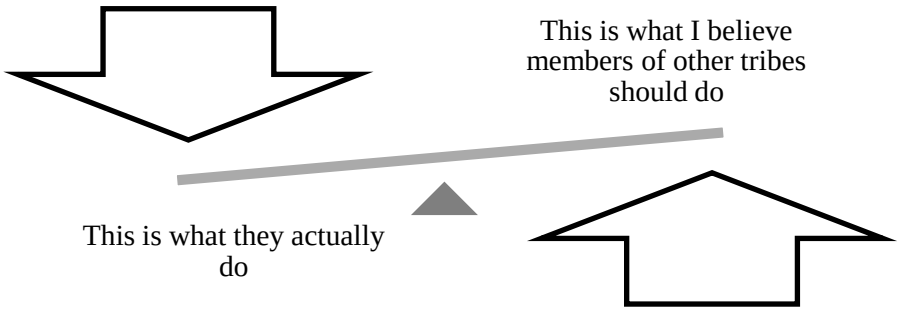


Figure 7. 15: Interdisciplinary imbalance

When roles become blurred between professional groups, it becomes difficult to distinguish each group from another and for a group to articulate their unique role to *themselves and others*. A result being confusion about professional roles and a dilution of professional identity, about which most participants expressed frustration. Blurring of professional boundaries creates inter and intra-disciplinary tensions (Baxter & Brumfitt 2008). Frustration was most evident when activities were not valued. For example, occupational therapists expressed frustration that "cooking groups" were not seen to involve complex assessments of independence. Similarly, social workers were frustrated that advocacy and complex negotiations with external agencies regarding housing, finance and legal issues were seen as "form filling." Again, these results confirm that each discipline has superficial understanding of the training, role, and specific skills of other disciplines.

Horizontal substitution resulted in concerns about role blurring, professional identity and tension between the professional groups. This resulted in competition for "control over similar areas of expertise" (Nancarrow & Borthwick 2005, p.911). A net result being that psychiatrists, psychologists and social workers, in particular, all claimed to have expertise in

delivering psychological interventions. The delivery of psychological interventions and therapies in public mental health services has been a source of discord between all five professional groups. Psychologists have long argued that they are the experts in the delivery of psychological interventions. They further argue the focus of their education and training is on being able to assess, formulate and deliver psychotherapy. However, this area has always been contested and remains so (Burns 2004; Corney 1999; Cregard 2018; Lankshear 2003).

Horizontal substitution was prolific in this area. Factors that contributed to this included, multi-graded positions, lack of role clarity, nonstandard competency frameworks and non-regulation of psychotherapy. This has fostered competition between the professional groups for control of this area of expertise and for the more powerful groups to use boundary-closing strategies in an effort to exclude or marginalise the less powerful groups (Cregard 2018). Clinicians recognised that power was central to being able to influence your own role and to influence others' roles. They recognised that the disciplinary groups with most power had the greatest control and capacity to determine their role and the activities they, and others, do or do not, perform.

All five professional groups had a general but stereotyped understanding of the role of the other groups (Carpenter 1995; Mandy, Milton & Mandy 2004). In terms of professional role, there was tension between disciplines in terms of what they viewed as discipline specific and generic activities. Most participants were concerned about the lack of role clarity between disciplines.

The nursing role was perceived by all five professional groups to be related to the physical care of consumers. This included administering medication, attending to any physical aspects of care, bathing and feeding consumers. This perception of the nursing role has been difficult to change, particularly on community public mental health teams (Cleary 2003). Crawford and colleagues (2008) found a negative impact on professional identity in community mental health nursing.

The generic nature of positions in public mental health services has also resulted in role ambiguity and a weakened sense of professional identity in occupational therapists (Edwards & Direttte 2010). The role of occupational therapists in public mental health services has been poorly understood and their skills underutilised (Bull, Hargreaves & Shakespeare 2008). Previous research has found the greatest level of role blurring has been between occupational therapists and social workers, with nine out of ten activities performed by these disciplines

being generic in nature (Lloyd King & McKenna 2004). This was evident in the results of this study. While participants were able to describe the occupational therapy role as concerned with the daily functioning of consumers and the provision of groups they were only able to identify one activity, Living Skills Assessment, as discipline specific. All other activities performed by occupational therapists were perceived to be generic. This confirmed a very superficial understanding of the role and activities performed by occupational therapists (Bull, Hargreaves & Shakespeare 2008).

The psychiatry role was perceived to include the provision of psychiatric and medical care to consumers within a legal framework. Psychiatrists were seen to be ultimately responsible for care decisions. This view of psychiatrists as leaders in healthcare is supported by the medical model, the literature and the results of this study (Khalili, Hall & DeLuca 2014). Psychiatrists also saw their role as including the delivery of psychological interventions. However, the other four disciplines reported pharmacotherapy as their focus, which confirms a superficial and stereotyped view of the psychiatry role (Carpenter 1995; Clavering & McLaughlin 2007).

The role of psychologists was perceived by all five professional groups to be the delivery of psychological therapies (individual and group), as well as mental health assessments in providing care to consumers of the public mental health service. However, nurses, occupational therapists, psychiatrists and social workers also believed they could provide psychosocial and psychological interventions (Currie & White 2012). This remains a source of intergroup tension between these disciplines, with psychologists arguing that there should be competency frameworks to ensure that those providing psychological interventions and therapies have met minimum standards. The fact that these boundaries have not been secured in the same manner as prescribing rights have been secured by doctors has resulted in the poaching of psychological therapies by the other disciplines (Hannigan & Allen 2011). Psychologists have perceived these boundary violations as professional identity threat and responded by attempting to assert their dominance in these activities (Cameron 2011; Foldy 2003).

Social workers were perceived to be concerned with advocating for consumers with external providers regarding legal, financial, daily living and accommodation needs. Social workers additionally perceived their role as meeting the psychological needs of consumers by providing both group and individual therapy (Frost, Robinson & Anning 2005). Yet none of the other professional groups saw this as part of the social work role. This perception remains

a source of tension for social workers. The results of this study are consistent with previous findings that social workers on community mental health teams felt more marginalised and experienced higher levels of role conflict, job dissatisfaction and increased levels of stress due to blurred boundaries (Carpenter et al. 2003).

7.5.7 Key Finding Seven: Change is Needed for Holistic Care

Key Finding: To ensure a holistic, collaborative and integrated approach to the provision of care change is required.

While there has been significant progress made over the decades in the treatment of those individuals diagnosed with mental illness, there is still much work to be done (Kohn et al. 2004). A holistic approach to the care of these individuals is required because "there is no health without mental health" (Prince et al. 2007, p.859). Yet despite acknowledging this, and recognising that mental health treatment requires a multi-faceted approach, it appears that for many individuals with mental illness they receive no treatment or treatment of uncertain value (Dickerson & Lehman 2011; Katz et al. 1997).

The public mental health service is meeting consumer needs across three domains. The first domain was in psychiatric intervention: consumers were provided with medication, and regular psychiatric reviews. The second domain was housing: consumers were found accommodation despite shortages of suitable low-cost housing. The third domain was in adherence to legislative and regulatory standards in the delivery of care: consumers were managed appropriately under relevant legislation. However, there is a range of needs across medical and social dimensions the service was not meeting. These needs were predominantly in the area of psychological and psychosocial interventions. These findings suggest that a holistic approach to the delivery of mental healthcare is yet to be achieved.

The profile of consumers of the SLHD public mental health service, obtained in the first pilot study, indicated that the majority have a diagnosis of schizophrenia (or psychotic illness), require psychiatric, medical, pharmacological, accommodation, financial, psychosocial and psychological interventions and support (AIHW 2013). Schizophrenia, mood disorders, epilepsy, substance abuse disorders, dementia, and other mental and neurological conditions constitute 13% of the global burden of disease (Andrews et al. 2003; Druss et al. 2001; Kohn et al. 2004; Kupfer 2005; Lewis et al. 1999; WHO 2017). Meeting the healthcare needs of individuals diagnosed with these conditions is a significant undertaking. The challenge for

any government and public mental health service is to provide evidence-based care that is cost efficient, clinically effective and efficacious for all consumers diagnosed with mental illness (Slade et al. 2007). This is not an easy task because consumers of public mental health services are a complex and challenging group.

A vast body of literature has assessed the merits of a variety of treatment modalities for people diagnosed with mental illness (Andrews et al. 2003; Berry & Haddock 2008; Drake, Bond & Essock 2009; Kazdin 2017; Santos et al. 2018). Most would argue that evidence-based treatment combines pharmacotherapy with psychological and psychosocial interventions (AIHW 2016; Fenton 2000; Fenton & Schooler 2000). Others have argued for integrated models that combine symptom-focused treatments with strength and vulnerability based rehabilitation efforts (Carpenter et al. 2004; Stovall 2007). Yet few consumers of public mental health services receive evidence-based treatment that meets all their needs.

Researchers have found the majority of consumers seen by public mental health services do not receive evidence-based interventions beyond pharmacotherapy (Drake et al. 2001; Falloon et al. 2004; Kazdin 2017). Individuals diagnosed with schizophrenia do not routinely have access to psychological interventions (Berry & Haddock 2008). This was borne out in the current study where respondents reported that the public mental health service was task oriented, hands-on and focused on basic physical and social needs. Furthermore, Berry and Haddock (2008) found when evidence-based practices were offered, there were problems with fidelity of implementation. For example, if CBT was offered it may have been for two sessions instead of the recommended 12 and the clinician offering CBT may have only completed a half-day workshop. It was not surprising to have these findings confirmed in this research. This study also highlighted the tension as to which discipline/s had the necessary training and skills to provide various psychosocial and psychological interventions. Most participants felt the focus of public mental healthcare is still on pharmacotherapy and symptom reduction. Clinicians were aware of the gaps in service provision and expressed concern that they could not provide evidence-based care to address all consumer needs equally.

Previous studies have identified some of the barriers to implementing evidence-based care. They include training, skill-mix and experience of mental health staff, the competing needs of service recipients and organisations, caseload and productivity requirements (Sullivan et al. 2009). Similar barriers were reported in this study with participants identifying lack of role

clarity, blurred boundaries, culture, resourcing, team composition and skill-mix as barriers to the provision of holistic evidence-based care.

To ensure that public mental health services meet consumer care needs in the future, change is required. Change must include recognition and valuing of discipline specific skills with management support for staff to use their specific skills, good communication and collaboration between staff. Role clarity is required which can be achieved through the development of competency frameworks. An holistic, collaborative and integrated model of care with a greater focus on long-term, therapeutic interventions as well as targeted strategies and models of care for different workplace settings is needed to ensure that the full range of consumer needs is met. Table 7.15 summarises the changes required.

Table 7. 15: Changes required in public mental health services

Number	**Changes Required**
1	Recognition and valuing of discipline specific skills
2	Management support of greater use of discipline specific skills
3	Good communication and collaboration between staff
4	Role clarity
5	Competency frameworks for different settings
6	A holistic, collaborative and integrated model of care
7	A greater focus on long-term, therapeutic interventions
8	Targeted strategies and models of care for different workplace settings

Better recognition and use of discipline specific skills must be made in addressing the full range of consumer needs. This requires public mental health services and management to value the unique skills of each disciplinary group. The support of management to implement these changes was seen as critical (Leggat et al. 2018). The results called for management to support staff in utilising their discipline specific skills and in being able to complete all administrative and generic tasks required. Certainly, implementing change in any organisation without strong management support is unlikely to succeed (Leggat et al. 2018).

Clinicians need to develop better skills in engaging, communicating and collaborating with each other as well as consumers regarding their discipline specific skills. True multidisciplinary collaboration and good communication were also viewed as essential

components in meeting consumer needs and the delivery of holistic public mental healthcare. True multidisciplinary collaboration was defined as recognition of the unique skills and contribution of allied health disciplinary groups to consumer care.

Greater role clarity is required for each discipline. In order to communicate the unique skills of each group. Competency frameworks for each discipline according to location/work setting need to be developed. This means frameworks uniquely applicable to acute care, rehabilitation, psychogeriatric units and community teams.

A coherent approach to the delivery of public mental healthcare is required to address gaps in service delivery. To meet the full range of consumer needs in the future calls for a holistic and integrated approach to the treatment of mental illness. This approach would include the provision of evidence-based psychosocial and targeted psychological interventions alongside pharmacotherapy. Different models of care would be explored, compared and evaluated. The discipline specific skills of nurses and allied health would be better utilised and a coherent approach to the delivery of public mental healthcare would be implemented to address the gaps in service delivery.

7.6 The Answer to the Overarching Research Question

The research question that started this exploration is: What is the role of allied health in the future of public mental health services?

After integrating the findings in this chapter, the answer to the overarching research question is that, the role of allied health in the future of public mental health services is to deliver evidence-based, holistic care to consumers, within a biopsychosocial model that incorporates, and values discipline specific skills.

7.7 Contributions of the Research

This research makes six significant contributions to the literature and mental health field. These contributions have both theoretical and empirical dimensions.

The first unique contribution is a new model of professional identity, the *4FM-PI*. This unique model was developed, tested and confirmed in this study. It is a model that combines several theories to understand this psychological construct. The *4FM-PI* is a model of professional identity that incorporates belonging (tribal theory) and attachment (role theory), while also recognising the importance of activities (discipline specific or generic activities)

and power (organisational hierarchy and role in relation to others) (Figure 7.16). The *4FM-PI* is a unique contribution to the theoretical and empirical literature on professional identity.

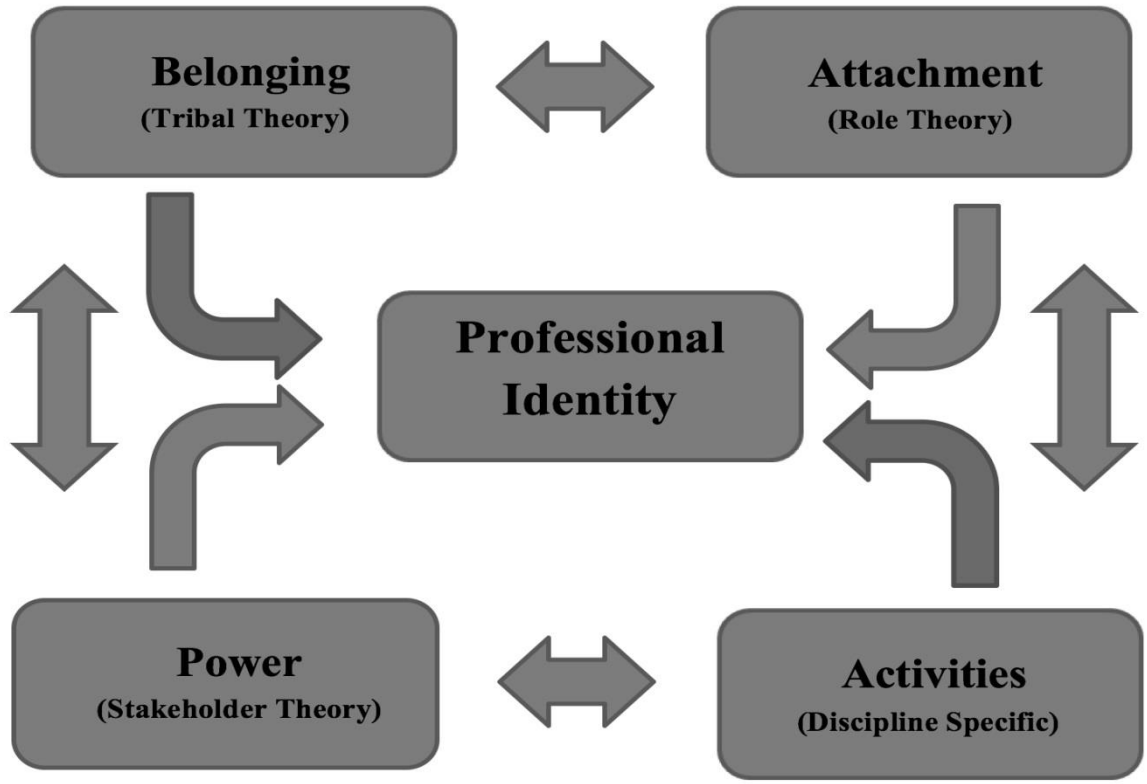


Figure 7. 16: The Four-Factor Model of Professional Identity (4FM-PI).

The second important contribution is empirically establishing that multi-graded positions have a negative impact on the identity of mental health clinicians. This is a unique study to measure and compare strength of professional identity between the five largest professional groups in mental health services. Multi-graded positions have resulted in blurred boundaries, tension, the appearance of faultlines between the professional groups, and the expansion of generic activities across all professions. Negative outcomes include conflict about who should provide psychosocial and psychological interventions; and a lack of role clarity between the professional groups resulting in clinicians feeling deskilled and devalued. Blurred boundaries occurred on inpatient units as well as community teams. This makes it difficult to differentiate the skill set of each professional group from the other groups (Lankshear 2003; Lloyd, King & Bassett 2002). Other than one study (Adams et al. 2006), researchers have not explored, measured or compared strength of professional identity in allied health staff. Our understanding of the factors that dilute and strengthen professional identity is important as strong PI has been associated with less turnover in teachers, doctors, social workers and nurses (Jiang et al. 2017; Sabanciogullari & Dogan 2015). Strong PI has

also been linked to increased job satisfaction (Sabanciogullari & Dogan 2015), greater motivation and effort to provide high quality patient care and optimal performance in multidisciplinary teams (Canrinus et al. 2012; Kelchtermans 2012, Molleman & Rink 2015).

The third valuable contribution of the research has been to develop a greater understanding of the relationship between role, amount of time spent in discipline specific activities, strength of professional identity and power (Lambert & Lambert 1991; Leonard 2003). The research compared how much time each professional group spent delivering activities that require discipline specific and generic skills (Lloyd, King & McKenna 2004). Professional groups with strong boundaries spent more time engaged in discipline specific activity, had a stronger professional identity and were perceived as more powerful. This research provides further evidence of the relationship between role and established power dynamics as well as role and professional identity (Best & Williams 2018). With ever-increasing demands on the health budget, provision of care to consumers of public mental health services must be cost-effective (Kind & Sorenson 1993; Mathers & Loncar 2006). When clinicians are engaged in generic activities for over half of their day, it is not a cost-effective approach to the delivery of care. This research provides evidence to consider models of care that can better utilise discipline specific skills. By doing so, productivity can be increased and evidence-based, quality care delivered to meet specific consumer needs.

The fourth contribution of the research is empirically to confirm that professional groups in public mental health services have a superficial and stereotyped understanding of each other's role. Deeper understanding of the specific activities associated with each professional group was lacking. It is important to be able to codify and understand the unique contribution of each professional group and the core skills each group contributes to patient care (Best & Williams 2018). The core skills of each professional group are devalued, underutilised, and professional identity is diluted if there is only a superficial understanding of each group's skillset. In healthcare, discipline specific skills and boundaries between the professional groups contribute to productivity and quality (Powell & Davies 2012) and influence communication, cooperation and leadership (Cregard 2018; Niezen & Mathijssen 2014).

The fifth contribution is empirically revealing that the medical model still dominates the provision of care to those diagnosed with mental illness. The medical model focuses on symptom management and the physical care of consumers (Gaebel, Riesbeck & Wobrock 2011). Yet, the literature acknowledges evidence-based and best practice care requires a

holistic approach (Falloon et al. 2004; Hodges 2007; Lehman et al. 2010). A holistic approach considers biological, social and psychological aspects of care. This research shows that public mental health services are yet to achieve a holistic approach to consumer care.

The sixth contribution is the research uniquely combines four survey tools, including one purpose-designed, empirically derived tool - the MHAC, for the investigation. This approach demonstrates the flexibility and innovation necessary to undertake a sophisticated, complex study of a significant problem.

7.8 Conclusion

In this chapter, the results from Chapters Five and Six were integrated to answer the research questions. The results from both chapters were triangulated to strengthen the validity of the findings (Flick 2004; Hussein 2015; Jick 1979). The chapter was organised into eight parts.

The first part of the chapter provided an overview of the research. The second part recapped the theoretical model. Answers to the eight research sub-questions and hypotheses were presented in the third and fourth parts, respectively. The fifth part discussed the nexus between power, professional identity and activities, linking the key research findings with the literature. The sixth part provides the answer to the overarching research question. The seventh part presented the contributions made by this study to the theoretical and empirical literature, and the final part is a brief summary of the chapter.

The eighth and final chapter of this dissertation summarises the research, identifies limitation of the study and areas that warrant further investigation. Additionally, it proposes several recommendations to the current models of care in public mental health services to achieve a more holistic, integrated approach to care that includes greater use of discipline specific skills to meet consumer needs.

8. Conclusion

8.1 Introduction

The purpose of this study was to investigate the role of allied health professional groups in the delivery of care to consumers of the public mental health service. This chapter provides a summary of that investigation and is comprised of six parts. The first part is a restatement of the critical reasons for the overarching research question, sub-questions and hypotheses. The second part provides a summary of each of the eight chapters that comprise this dissertation. The third part presents the concise answers to the overarching research question, sub-questions and hypotheses. The fourth part presents recommendations to the delivery of public mental healthcare in the future. The fifth part summaries the study limitations and then identifies areas that warrant further research. The final part draws the chapter to a close.

Previous research has found the case management model of care in public mental health services has encouraged generic over specific skills (Robinson & Cottrell 2005). This has occurred due to policy changes and models of care that have emphasised genericisation of roles (Sanborn 2014). Multi-graded positions have resulted in a blurring of roles and changes to the scope of practice between the five largest professional groups represented in public mental health services (Brown, Crawford & Darongkamas 2000; Brown, Crawford & Darongkamas 2001; Cameron 2011; Crawford, Brown & Majomi, 2007; Cregard 2018). The five largest professional groups are nursing, occupational therapy, psychiatry, psychology and social work. This multidisciplinary approach has meant that allied health professionals have lost their distinctive roles as well as their discipline specific skills (Nugus et al. 2010). It has resulted in conflict and tension between the professional groups as they have attempted to protect their professional boundaries (Cregard 2018).

In summary, the five critical reasons for understanding the role of allied health in the future of public mental health services are: First, it is important to develop a greater understanding of the relationship between role, amount of time spent delivering discipline specific skills, strength of professional identity and power (Lambert & Lambert 1991; Leonard 2003). Second, it is important to understand the impact of multi-graded positions on the professional identity of mental health service staff (Lankshear 2003). Third, it is important that consumers of public mental health services are provided with care that is evidence-based and best-practice (Falloon et al. 2004; Hodges 2007; Lehman et al. 2010). Fourth, with ever-increasing demands on the health budget, provision of care must be cost-effective (Kind & Sorenson

1993; Mathers & Loncar 2006). Cost-effective care is built upon understanding the role and contribution of each clinical group. Finally, the staffing of mental health teams in the future may require the introduction and use of different types of staff, such as, peer workers or allied health assistants. These groups may be able to provide generic activities so that allied health disciplines can provide discipline specific activities (Lammers & Happell 2003; Lizarondo et al. 2010). Understanding the role and contribution of each clinical group is necessary for effective interprofessional care.

This understanding gave rise to the aim of this research, which was to answer the question: *what is the role of allied health in the future of public mental health services?*

The research also answered eight research sub-questions and tested three hypotheses, which are interrelated (Table 8.1 and Table 8.2). The eight research sub-questions were divided into four themes - activities, skills, professional identify and power.

Table 8. 1: Research sub-questions

Themes	**Questions**	**Hypotheses**		
		H 1	**H 2**	**H 3**
1. Activities	1.1 What activities are performed by the five disciplines in the mental health service?			
	1.2 How much time is spent by each discipline on performing these activities?	×		×
2. Skills	2.1 Do the activities performed by each of the five disciplines require generic or specific skills?			×
	2.2 Who does each discipline believe should perform these activities?			
3. Professional Identity	3.1 What is the strength of professional identity of each of the five disciplines?	×	×	×
	3.2 What is the relationship between strength of professional identity and discipline specific activities?	×	×	×
4. Power	4.1 What is the interaction between professional identity, discipline specific activities and power?		×	
	4.2 What effect does this interaction have on the provision of care to consumers of the public mental health service?			

Table 8. 2: Hypotheses

Hypothesis
1. Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.
2. Strength of professional identity will have a positive relationship with power.
3. There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

8.2 The Dissertation Chapters

The thesis is comprised of eight chapters. The introductory chapter outlined the research question and provided an overview of the rationale for this study. The research was placed within the context of the Australian health system, which enabled the introducing and describing of the research problem. From here, an overview of the rationale for the study and previous research in this area was outlined. Then the overarching research question, sub-questions and hypotheses were specified. The unique contribution of this research to the theoretical and empirical literature was stated, and the scope of the study defined. Finally, a brief overview of the research methodology was provided and the structure of the thesis was outlined.

Chapter 2 outlined the study context. The chapter began with a brief overview of mental health services first in Britain and then the development of mental health services in Australia. The major social, historical, medical and political developments that have influenced our understanding of mental illness and treatment of the mentally ill were identified. The chapter then traced the historical development of the five major professions currently represented in public mental health services - nursing, psychiatry, occupational therapy, psychology and social work - in order to understand how role blurring between these professional groups has evolved. A journey through history helped shed light on the current tensions and role overlap between these professional groups that staff public mental health services today.

Chapter 3 reviewed the literature on tribal, role, professional identity and stakeholder theories and specific versus generic skills. The chapter reviewed the impact that new models of care, changing roles, extended scope of practice and blurring of roles have had on the professional

identity of staff employed in public mental health services. A new model of professional identity was developed, named the *Four-Factor Model of Professional Identity* (4FM-PI), and empirically tested in this thesis.

The 4FM-PI is a model of professional identity that incorporates belonging - tribal theory, and attachment - role theory, but also recognises the importance of activities - discipline specific or generic activities, and power - organisational hierarchy and role in relation to others. The development of the 4FM-PI meets needs in the literature calling for an expansion in the construct and offers a theory-driven, multifactorial and nuanced approach to this construct. This model development and verification has been a unique contribution of this research.

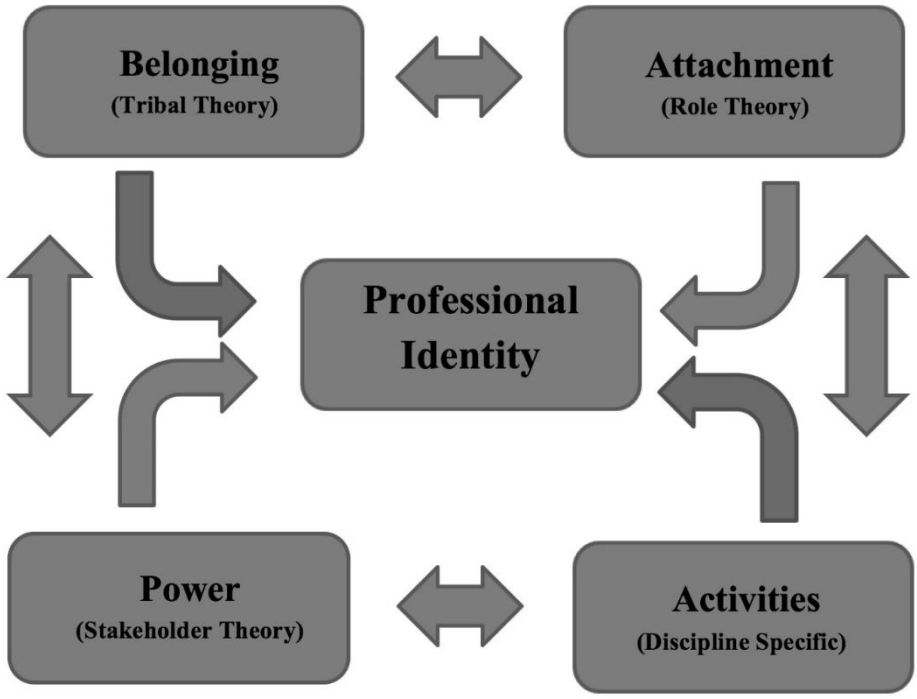


Figure 8. 1: The 4FM-PI – a unique contribution to the theoretical literature

Chapter 4 provided a description and justification of the research methods selected to explore the thesis questions and hypotheses. The research adopted a mixed methods research design using both quantitative and qualitative methods. The quantitative research adopted an objectivist and positivist approach. Four psychometric measures were used: the Demographic Data Questionnaire (DDQ), Mental Health Activities Checklist (MHAC), Professional Identity Scale (PIS) and Power Questionnaire (POWQ). The MHAC was developed specifically for this research. It is a purpose – designed and empirically derived instrument.

The survey questionnaires provided a profile of the study participants and the activities they performed. The questionnaires also measured strength of professional identity and power of each professional group. Data was analysed using inferential statistics.

The qualitative method adopted a constructivist and interpretivist approach and consisted of semi-structured interviews. Participants were asked: to describe their role; which professional group they were most and least, similar to; how role clarity could be achieved; if the needs of consumers are being met; and, in the future, what is required to meet the needs of consumers. Interviews were transcribed and analysed using thematic content analysis.

Chapter 5 presented the quantitative analysis of the data. Descriptive statistics were used to present the demographic data. Three hundred and twenty respondents participated in the study. The overall response rate was 44.5%. Nearly half of respondents were nurses (49%), while the other half was comprised of a mix of psychiatrists (19.3%), psychologists (13.9%), social workers (10.1%), and occupational therapists (7.9%). About 57% of respondents had post-graduate qualifications in addition to a Bachelor's degree. Over 70% of respondents were under the age of 50 years, employed less than 10 years (70%), and nearly two-thirds were female (65%). About 71% of respondents were located on inpatient units and 29% on community teams. Just over half of respondents (55%) had less than 10 years specific mental health experience and just under half (45%) had over 10 years of mental health experience.

The activities theme was first investigated through two research sub-questions. The activities performed by the five disciplines in the public mental health service and how much time each discipline spends on performing these activities were examined. There was a significant difference between disciplines in time spent performing discipline specific and generic activities. Psychiatrists spent the most time in discipline specific activity and the least amount of time in generic activity. There was also a significant difference between time spent by staff on discipline specific activity on inpatient units and community teams. Staff on inpatient units spent more time engaged in discipline specific activity. Staff on community teams spent more time engaged in generic activity. The key finding in this section was organisational setting or location shapes and influences how much time each disciplinary group spends on discipline specific and generic skills. These results confirm the impact of positions on community teams that are multi-graded (Brown, Crawford & Darongkamas 2000; Fox 2013).

The skills theme was explored through two research sub-questions, which considered whether the activities performed by each of the five disciplines require generic or specific skills. The

five professional groups in the public mental health service engaged in both discipline specific and generic activities in the provision of care to consumers. The top 20 activities performed by each professional group were mostly generic activities involving significant crossover between the five groups. Horizontal substitution was most evident between nursing, occupational therapy, psychology and social work. Vertical substitution was most evident between psychiatry and nursing, as well as psychiatry and psychology. Psychiatrists spent the most time engaged in discipline specific activity and the least time on generic activities. This significant finding reveals professional groups with impermeable boundaries spend more time in discipline specific activity. Previous studies have mainly explored the impact of role blurring in public mental health services on nurses, occupational therapists and social workers (Brown, Crawford & Darongkamas 2001; Brown et al. 2011; Cameron 2011; Carpenter et al. 2003; Corney 1999; Frost, Robinson & Anning 2005; Lloyd, King & McKenna 2004). This study furthers our understanding of the impact of role blurring on psychiatrists and psychologists in public mental health services and is a unique empirical study to explore this issue with these disciplines.

There was a high level of congruence between the five disciplines in terms of their perception of their own role and others perception of their role. There was agreement that the nursing role was primarily concerned with medication and the physical care of consumers. The occupational therapy role was primarily concerned with activities of daily living and the provision of groups. The psychiatry role was primarily concerned with the psychiatric, medical and legal care of consumers. The psychology role was primarily concerned with the delivery of psychological interventions. The social work role was concerned with activities related to advocating for consumers with external providers. However, the understanding of each other's roles appeared to be superficial and stereotyped. Deeper understanding of the specific activities associated with each professional group was lacking. This was most apparent for the allied health professional groups. This study strengthens previous findings that clinicians do not know much about the role and training of other disciplines and when to refer to them (McGrath et al. 2011; Page & Meerabeau 2004).

Professional identity was examined through two research sub-questions. These explored the strength of professional identity of each of the five disciplines and the relationship between strength of professional identity and discipline specific activities. The difference in strength of professional identity between disciplines, while in the predicted direction, was not statistically significant on inpatient units, community teams or across the public mental health

service. Even though not statistically significant, strength of professional identity was strongest in psychiatrists, then nurses, occupational therapists, psychologists and social workers. These results confirmed previous research findings (Baldwin 2007). The results are consistent with the existence of the rigid hospital hierarchy.

Finally, power was evaluated through two research sub-questions. These focused on investigating the interaction between professional identity, discipline specific activities and power. There was a high level of agreement between groups in terms of how much power each disciplinary group is perceived to possess. The results confirmed the power structure of the hospital hierarchy. Psychiatrists were perceived as possessing the most power, then nurses, psychologists, social workers and, last, occupational therapists. The results indicated that, in general, as professional groups increase the time they spend performing discipline specific activities, there were corresponding increases in strength of professional identity and power. The results in this study confirm previous findings, that irrespective of clinical stream, the doctors' role is always dominant (Nugus et al. 2010).

The three hypotheses were tested. For hypothesis one, there was a positive relationship between time spent on discipline specific activities and strength of professional identity. For hypothesis two, there was a positive relationship between strength of professional identity and power. For hypothesis three, while in the predicted direction, there was no significant difference in strength of professional identity or power between inpatient and community staff. This is a unique study to test the relationship between professional identity and time engaged in discipline specific activity, professional identity and power and professional identity, power and organisational setting.

Chapter 6 presented the results of the interviews. This chapter presented an exploration of staff views: on the activities they perform; their role; the role of other groups; power relationships between the professional groups; and, whether the public mental health service was meeting the needs of consumers. Participants agreed that a multidisciplinary approach, and a combination of both discipline specific and generic activities, were required to meet the needs of consumers. Participants agreed that some role overlap between nursing, occupational therapy, psychiatry, psychology and social work is beneficial and enables a shared understanding of care. However, they were concerned that the emphasis was increasingly on generic, physical care that was task-focused, hands-on and coercive. The emphasis on generic activity resulted in horizontal substitution, crossover of tasks, role

blurring and lack of role clarity. This resulted in concerns about professional identity and tension between professional groups. These results strengthened previous findings (Brown, Crawford & Darongkamas 2001; Brown et al. 2011; Cameron 2011; Carpenter et al. 2003; Corney 1999; Frost, Robinson & Anning 2005; Lloyd, King & McKenna 2004). Participants were also concerned that consumer needs in psychological and psychosocial interventions were not being met.

A lack of role clarity resulted in clinicians feeling deskilled and devalued. While blurred boundaries occurred on community teams due to multi-graded positions, they also occurred on inpatient units. Clinicians reported that culture, resourcing, team composition and skill-mix contributed to role blurring. Clinicians were surprised at the superficial understanding they had of the training and skills of professional groups other than their own. Blurring of professional boundaries created inter and intra-disciplinary tensions (Baxter & Brumfitt 2008). A result being confusion about professional roles and a dilution of professional identity, about which most participants expressed frustration. This was consistent with previous findings (Corney 1999; McGrath et al. 2011).

The medical model reinforced the hospital hierarchy. Psychiatrists were perceived as the leaders in the public mental health service by all professional groups, including themselves. They were also viewed as possessing individual power and authority. Nurses were the group most likely to challenge psychiatrists for power through their collective numbers. Most participants identified that power enabled clinicians to have more control over their role and, therefore, spend more time utilising discipline specific activities in the provision of care. These results confirm previous studies about the powerful position doctors hold in health services (Atwal & Caldwell 2005; Baldwin 2007; Clark 1997; Sauer 2015).

Participants reported that they perceive the public mental health service is meeting consumer needs in two essential ways: across basic physical and social requirements; and psychiatric care within a medico-legal framework. However, they did not think consumer needs are being met in relation to the provision of longer-term, psychological and psychosocial interventions. Researchers have found the majority of consumers seen by public mental health services do not receive evidence-based interventions beyond pharmacotherapy (Drake et al. 2001; Falloon et al. 2004; Kazdin 2017). Individuals diagnosed with schizophrenia do not routinely have access to psychological interventions (Berry & Haddock 2008). This was confirmed in the current study where respondents reported that the public mental health

service was task oriented, hands-on and focused on basic physical and social needs. In order to meet consumer needs in the future participants argued that a collaborative, holistic approach that is supported by management is required. That is, an approach that recognises the unique contribution and skill set of each professional group.

Chapter 7 provided a summary of the research findings, the triangulated data, and a complex discussion exploring the nexus of professional power, identity and activities. This chapter described the implications of the research, and highlighted the unique contribution to the literature made by the research. The unique theoretical contribution to the literature is the development of a four-factor model of professional identity, the 4 FM-PI. The unique empirical contribution is to have empirically validated the model in this study. The use and combination of four psychometric measures: the Demographic Data Questionnaire (DDQ), Mental Health Activities Checklist (MHAC), Professional Identity Scale (PIS) and Power Questionnaire (POWQ) is an original combination and unique to this study. Additionally, the MHAC was specifically developed and empirically validated for use in this study.

8.3 The Answers to the Study Questions and Hypotheses

The aim of this research was to answer the question: *what is the role of allied health in the future of public mental health services?* The concise answer to the study question is that the role of allied health in the future of public mental health services is to deliver evidence-based, holistic care to consumers, within a biopsychosocial model that incorporates and values discipline specific skills. This answer confirms that allied health discipline specific skills are integral to meeting the needs of consumers of public mental health services and delivering best practice, evidence-based care within a holistic framework. This answer was derived through combining the answers to the sub-questions and hypotheses (Tables 8.1 and 8.2, pp.243-244). A synthesis of the results to these research sub-questions and hypotheses are summarised in Table 8.3 below.

Table 8. 3: Key research findings

Number	Finding
1	The role of each disciplinary group is determined by belonging to, or membership of a tribe, together with the activities that are performed by that tribe.
2	The activities required in the provision of care to consumers are a combination of discipline specific and generic activities.
3	The more power a disciplinary group possesses, the more time that group can spend

Number	Finding
	delivering discipline specific activities.
4	Organisational setting or location shapes and influences how much time each disciplinary group spends on discipline specific and generic activities.
5	The more that each disciplinary group can secure its discipline specific activities from intrusion by others, the more time it will spend on them.
6	There was imbalance between what clinicians believed their role should be, and what activities they should perform, to what they were doing.
7	To ensure a holistic, collaborative and integrated approach to the provision of care change is required.

8.4 Changes Recommended to Public Mental Health Services

In order for allied health clinicians to assist consumers in being discharged from hospital and live independently in the community, discipline specific skills are required. Currently allied health discipline specific skills are undervalued and underutilised. These skills need to be acknowledged and better utilised by public mental health services. This can be accomplished by achieving role clarity between nursing, occupational therapy, psychology and social work. Role clarity can be achieved with the development of discipline specific competency frameworks for first episode, acute, rehabilitation and extended care, psychogeriatric and adolescent services. Each is required because organisational setting or location influences how much time each disciplinary group spends on discipline specific and generic activities.

Discipline specific allied health skills are required to meet the needs of consumers of public mental health services in the areas of psychosocial and psychological interventions. Researchers and clinicians have recognised that services need to deliver care, now and into the future, using a biopsychosocial model with such interventions (Addington & McKenzie 2012; Riggs et al. 2012; Vieta 2010; Ziedonis et al. 2005). There is a need for creating a context that allows services, and individuals, to identify and develop systems, processes and networks to do so.

Pharmacotherapy, in conjunction with psychotherapy, is required to prevent relapses and to keep consumers well, and functioning independently in the community (Drake et al. 2001; Williams 2015). Allied health professional groups have specific skills to meet consumer needs in these areas but they need to be better utilised if improved consumer outcomes are to be achieved. Alternative models to case coordination should be explored to achieve this. An

interdisciplinary, rather than multidisciplinary, approach in community public mental health services is recommended. A multidisciplinary approach favours multi-graded positions and genericisation of skills. Whereas, an interdisciplinary approach allows each disciplinary group to clearly define and use their disciplinary skills in the provision of care to consumers.

The role of allied health professionals in the future of public mental health services care needs developing and the implications of the findings for policy and practice require further exploration, for example, in terms of change management. If professionals have a limited and superficial understanding of each other's role in the context of consumer needs for a holistic and integrated approach there are implications in terms of improving understanding, communication and interdisciplinary relationships beyond clarifying roles and competencies. These may include further research, training and education of mental health staff, the development of induction and orientation programs addressing this issue, the creation of student educator positions and shared communication protocols.

There is a need to consider the use of new workforces and professions, such as peer support workers, allied health assistants and generic mental health workers, to perform care coordination roles on community teams (Lammers & Happell 2003; Lizarondo et al. 2010). These workers potentially offer a cost-effective model for the delivery of public mental health services. They can be employed to take on many of the generic activities currently provided by allied health clinicians. This, in turn, would enable allied health clinicians to provide discipline specific interventions in the provision of care to consumers.

8.5 Study Limitations and Directions for Future Research

The research was conducted on a metropolitan mental health service. Historically and currently, most metropolitan services are better staffed and resourced than rural and remote services (Schoo et al. 2005). Metropolitan services generally have less difficulty in attracting and retaining staff. This is not so for remote and rural services where poor access to education, training and clinical supervision, limited opportunities for career progression, higher workloads, and inadequate resources have been identified as barriers to recruitment and retention (Mullei et al. 2010; Perkins, Larsen & Burns 2007, Schoo et.al 2005). Staffing of rural and remote public mental health services consists mainly of nurses and fly-in-fly-out psychiatrists. Allied health representation varies, as recruitment of allied health staff is problematic. Hence, it would be worthwhile to explore: if the impact of multi-graded positions on public mental health staff is the same irrespective of location; if there is blurring

of boundaries between professional groups in rural and remote services; and, what effect these issues may have on strength of power, professional identity and activities in different service locations. It would also be worthwhile to explore whether rural and remote public mental health staff consider services are meeting consumer needs and what, if any, changes are required to meet consumer needs in the future.

It would be worthwhile to compare the findings from this research to a similar metropolitan service in other locations, both within Australia and in other countries. Discussions with professional colleagues from similar metropolitan public mental health services, at conferences and industry events when presenting the research study, suggests they face the same difficulties and concerns in relation to role blurring, professional identity, power dynamics and consumer care. Further empirical research is required to strengthen the evidence base and provide additional strategies for service improvement.

Another area that warrants further attention is exploring whether professional identity and power are stable or variable, static or developmental, and, therefore do, or do not, change over time. This research obtained a cross-sectional measurement of both professional identity and power for the five professional groups in the public mental health service. Professional identity is said to develop over time and involves acquiring the professional practices, skills and values of the profession or acquiring a particular professional role (Schein 1978). In order to explore the potential developmental nature of professional identity, future research could compare strength of professional identity and power in graduates from the five professional groups to measures of professional identity and power after five and ten years of experience working in mental health services.

Most research on professional identity and power has focused on between group differences (Adams et al. 2006; Barbour & Lammers 2015; Hotho 2008; Morrison & O'Boyle 2008). Different professional groups have been compared on these two variables. However, there is no research on *within group differences* on these two variables. It is not known whether differences exist in strength of professional identity and power within each discipline based on stratification. Stratification is defined as a hierarchy between the different specialist areas within a discipline. Stratification helps protect intra-disciplinary boundaries. It is not known, for example, if there is a difference in measures of these two variables between neurosurgeons, paediatricians, cardiologists and psychiatrists. Similarly, researchers do not know whether there is a difference in measures of these two variables between midwives,

theatre nurses and psychiatric nurses. These gaps in knowledge warrant further exploration and may indicate a relationship between professional identity and area of specialisation.

This research provided evidence that supports a new multi-faceted, multi-factorial model of professional identity. Yet instruments that measure professional identity like the PIS focus on a narrow, two-factor model of professional identity. Further work is required in developing instruments to measure this more expansive four-factor model of professional identity. This could include, for example, new professional identity scales that would include questions on belonging, attachment, activities and power validated using all health professionals, not just nurses.

A limitation of this research is that the amount of time participants spent on discipline specific and generic activity was self-reported. An ethnographic approach may have yielded more objective and accurate data to this question. Such an approach would have been time-consuming and beyond the resources of this study. It is worthwhile for a future project to design and implement an ethnographic study to compare participants' perceptions of the time they spend in discipline specific and generic activities with an objective measure of this time.

Further work is also required to understand the relationship between strength of professional identity and burnout, intention to stay, staff morale, job satisfaction, professionalism and high quality patient care. There is a knowledge gap in these areas in public mental health services. Additionally, research into these issues with professionals in private health services would further add to the knowledge base, and provide points of comparison to their professional colleagues in the public sphere.

Further work is also required on exploring the impact that working in teams has on professional role/identity versus team role/identity. The focus of this thesis was on exploring the identity and roles of disciplinary groups working together and not on the nuances and dynamics of teamwork. This is an area that warrants further exploration.

The 4FM-PI was tested in public mental health services but it has not been tested elsewhere. Further research should test this model in community and drug health services and other healthcare settings, including acute and aged care services.

It would be worthwhile to obtain data on perceptions from consumers and their families as to how well they understand the role of each professional group in public mental health services as a comparison to the current study as well as to explore whether consumers feel that their

various needs across multiple domains are being met by public mental health services, and if not what they identify as the gaps in services.

Another extension might be comparisons to other segments of healthcare that are now undergoing (or have in the past undergone) changed models of delivery, perhaps as a combination of inpatient and community services (e.g., midwifery), where multiple disciplines jockey for control over the delivery of services. This would acknowledge other research that has addressed similar questions about role, identity, and dominance in the broader umbrella of specialisation within the system of professions.

This research reported that public mental health clinicians are doing the best they can to meet consumer needs with current resourcing, high demands and care models. Further work is required to discover whether public mental health services are delivering evidence-based care in meeting the needs of consumers. Similarly, research is required to investigate whether clinicians delivering psychosocial and psychological interventions to consumers of public mental health services are appropriately trained to do so. More work is required to determine appropriate standards and competency frameworks in the delivery of psychological and psychosocial interventions. Furthermore, where psychosocial and psychological interventions have been provided by mental health clinicians, more work is required to determine whether fidelity to evidence-based models has been maintained.

8.6 Conclusion

Mental health consumers will remain a complex and challenging cohort. In order to meet the needs of these consumers mental health professionals require a range of skills both generic and discipline specific. Role overlap between nursing, occupational therapy, psychiatry, psychology and social work is beneficial and enables a shared understanding of care. However, when the overlap blurs the distinction between professions and roles extensively, it limits individual and collective ability to address the full range of consumer needs while underutilising allied health discipline skills. The study has made recommendations about changes to public mental health services to meet the full range of consumer needs into the future, and identified areas that warrant further investigation.

Mental health clinicians face considerable challenges to deliver high quality evidence-based consumer centred care. Nevertheless, they strive to meet consumer needs thought a complex mix of generic and discipline specific activities. However, changes to the current models of care are required to ensure that public mental health services deliver evidence-based, holistic

care that includes the delivery of integrated psychological and psychosocial interventions in meeting the needs of consumers. Allied health discipline specific skills are required now, and into the future, to deliver holistic healthcare to consumers of public mental health services.

List of Appendices

Appendix 1 Archival Data Letter

Mental Health Services

Associate Professor Storm
Administration Building
Concord Centre for Mental Health
CRGH, Hospital Rd.
CONCORD 2139

27 May 2013

Dear Assoc. Prof. Storm.

RE: Permission to access archival Mental Health Service patient files and data.

Further to our recent conversation, in conjunction with my Primary Supervisor, Associate Professor Jeff Patrick from the University of Tasmania (UTas) I have finally been able to decide on a research area for my Doctorate in Health Service Management (DBA –HSM). My research will focus on answering the question. "What is the role of allied health in the future of public mental health services?

The first phase of this research requires an archival analysis of the patient group in order to answer the question. "Who do we see?" In order to complete Phase 1 I seek permission to access archival patient medical records.

The data I will be gathering is purely demographic and descriptive in nature. It will be a random sample of initially 50 patient medical records. No individual will be identified and no medical records will be copied or leave the premises of CCMH or CRGH.

The patient files will be audited in my office on Kirkbride Unit and locked in a filing cabinet overnight. The confidentiality and privacy of patients will not be compromised in any way. The majority of the auditing and gathering of archival data will be performed on weekends and after hours. I trust that I will have your support in this initial phase and during the course of the research. I aim to keep you informed at every step and I thank you in anticipation of a favourable response.

Yours Sincerely,

Lil Vrklevski.

Sydney LHD Mental Health Service
Concord Centre for Mental Health
Level 1, Building 109, CRGH, Hospital Rd,
Tel: (612) 9767 8900 Fax: (612) 9767 8901

Appendix 2 Archival Data Sheet

ARCHIVAL DATA SHEET

AGE	
GENDER	**MALE/FEMALE**
Date of First Admission	
Diagnosis	
Axis I	
Axis II	
Axis III	
Axis IV	
Axis V	
TOTAL # OF ADMISSIONS	

Admission #					
Admission Method					
Legal Status: Voluntary/Involuntary					
LOS					
Discharge Where					
CTO					
Admission #					
Admission Method					
Legal Status: Voluntary/Involuntary					
LOS					
Discharge Where					
CTO					
Admission #					
Admission Method					
Legal Status: Voluntary/Involuntary					
LOS					
Discharge Where					
CTO					
Admission #					
Admission Method					
Legal Status: Voluntary/Involuntary					
LOS					
Discharge Where					
CTO					

Appendix 3 Pilot Study 1 – The Profile of Consumers of the SLHD Mental Health Service

1. The Role of Pilot Studies

Pilot studies are also known as preliminary, feasibility or vanguard studies (Thabane et al. 2010). There are several definitions of pilot studies but most have common defining elements (van Teijlingen & Hundley 2002). One definition of a pilot study is "an experimental, exploratory, test, preliminary, trial or try out investigation" (Waite 2001, p.2). A more expansive definition of a pilot study is "a trial study carried out before a research design is finalised to assist in defining the research question or to test the feasibility, reliability and validity of the proposed research design" (Thabane et al. 2010, p.2) There are many benefits in using pilot studies (van Teijlingen & Hundley 2002).

1.2 The Purpose of this Pilot Study

The purpose of this pilot study was to establish whether consumers of the SLHD mental health service were representative of consumers of public mental health services nationally, and thereby guide the planning of the main research study (Turner 2005).

Before being able to proceed with the main investigation, it was necessary to understand the profile of consumers of public mental health services. It was also necessary to establish whether the profile of consumers of the SLHD mental health service matched the profile of consumers of public mental health services nationally. If so, the needs of consumers of public mental health services identified in the Australian Institute of Health and Welfare Report (AIHW 2016) would be the same as the needs of consumers of the SLHD mental health service.

1.3 An Overview of Mental Health Services in Australia

The information about the profile of consumers of public mental health services was gathered from reports published by the Australian Institute of Health and Welfare Studies, an organisation charged with the responsibility of gathering annual, national data on Australians living with mental illness and mapping the services that provide treatment and care (AIHW 2013).

1.4 A Definition of Mental Illness

Mental illness is the umbrella term that describes a range of psychiatric and psychological disorders that vary in severity. These disorders can cause an individual to experience significant impairment in cognitive, affective, behavioural and social functioning (DoHA 2009). Mental illness can affect an individual's ability to work, study, form relationships, establish stable accommodation, engage in social and community events and attend to activities of daily living. Individuals diagnosed with mental illness are also exposed to stigma, discrimination and isolation (Larkings, Brown & Sholz 2017). Mental illness that is untreated or inadequately treated can also have deleterious consequences for the individual and society, such as increased risk of self-harm, deliberate suicide, death by misadventure

and harm caused to others. Much remains to be known about what causes mental illness (DoHA 2009).

1.5 How Many People are Affected by Mental Illness?

Approximately 2 million Australians receive mental healthcare annually. This compromises about 10 % of the Australian population (AIHW 2016). The most prevalent disorders are mood, anxiety and substance use disorders. About 45% of the population aged between 16 and 85 will experience one of these disorders during their lifetime (DoHA 2009). The most complex to treat and costly mental health disorders are the psychotic disorders, eating disorders and severe personality disorders (DoHA 2009). These disorders carry most risk to individual and society.

The symptoms of psychosis include; cognitive, affective, behavioural and perceptual disturbances. The most common psychotic disorder is schizophrenia. Approximately 64,000 individuals with schizophrenia are managed annually by public mental health services (Bewley & Morgan 2011). People living with a diagnosis of schizophrenia are one of the most misunderstood and misrepresented groups by media (Bewley & Morgan 2011).

1.6 The Cost of Mental-Health Services

Treating and managing mental illness is costly (AIHW 2013). In 2017, Australia spent $8.5 billion on mental health services. This figure is projected to increase by about 4% each year (AIHW 2017). Mental health admissions in public hospitals cost $1.8 billion. $1.6 billion was spent on funding of community mental health services. Residential mental health services cost an additional $238 million.

1.7 State and Territory Community Mental Health Services

Each year there are over 7.1-million occasions of service (oos) delivered by community mental health services (AIHW 2016). The demand on community mental health services has grown and continues to grow. Approximately 1 in 7 contacts were provided on an involuntary basis (AIHW 2016). This is known as compulsory treatment under a Community Treatment Order (CTO). Consumers deemed to be at high risk of non-compliance with treatment, loss to follow-up treatment in the community, self-harm, suicide or harm to others are typically managed on a CTO.

More males were seen by mental health services than females (AIHW 2013). Individuals aged between 35-44 accessed services most frequently. Individuals in urban areas accessed services more frequently than those living in rural and remote regions. This may be explained by the availability and access to mental health services rather than prevalence and need (AIHW 2013). Individuals accessing community mental health services had the following diagnoses; schizophrenia (26.6%), depressive disorder (10.1%), bipolar affective disorder (5.8%) and schizoaffective disorder (5.5%).

1.8 Mental Health Services Provided In Emergency Departments

Emergency Departments recorded 243,444 mental health related occasions of service in 2010-2011 (AIHW 2013). About 30 percent of mental health related ED presentations required admission.

1.9 Admitted Patient Mental Health-Related Care

In 2010-2011, there were 223,261 separations from mental health inpatient facilities. More males were admitted than females. The highest admission rates were patients aged 35-44. Approximately 29% of patients were involuntary admissions.

The most frequently reported interventions were delivered by allied health clinicians, social workers and occupational therapists. An explanation for this may be that allied health staffing ratios are typically greater for these two disciplines than they are for psychologists (particularly for inpatient services). For example, in the inpatient units of the SLHD mental health service there are 2 dedicated FTE social workers and 2 occupational therapists deployed within each unit (a ratio of 12-15 consumers per social worker and occupational therapist). Yet there are only two FTE clinical and clinical neuropsychologists covering over 180 beds at the Concord Centre for Mental Health (CCMH).

The average length of stay (ALOS) in public mental health facilities was between an average of 12.6 days in Tasmania and 18.0 days in Western Australia. The ALOS in NSW was about 15.6 days (AIHW 2016).

The limitations most commonly reported were in the following domains: psychosocial, interpersonal, financial, vocational, educational and functional (communication, domestic activities, self-care and transport) (AIHW 2013).

1.10 The Mental Health Workforce

The mental health workforce is comprised of the following five largest groups of healthcare professionals; nurses, occupational therapists, psychiatrists, psychologists and social workers Mental health services are predominantly staffed by nurses (50.6%), followed by diagnostic and allied health professionals (19.0%) and psychiatrists (including psychiatric registrars) (9.9%). Diagnostic and allied health professionals included occupational therapists, psychologists, social workers and other clinicians (other than medical or nursing) (AIHW 2013).

1.11 What is the Profile of Mental Health Consumers of Public Mental Health Services?

In summary, the data provides the following profile of consumers of public mental health services across Australia (AIHW 2013):

- The primary diagnosis is schizophrenia or schizoaffective disorder.
- About 70 percent are admitted as involuntary patients.

- The most common co-morbid conditions are behavioural disturbance and substance use disorder.
- There is a higher proportion of males in the 25-44 year age group but overall most consumers are within the 35-44 year age group.
- One in seven consumers is managed under a CTO in the community, i.e. they have been discharged on a CTO from an inpatient facility.
- Most require assistance with self-care, accommodation, employment, financial and social issues;
- The average length of stay (ALOS) as an inpatient is between 12.6-18 days.

2. Research Questions

Does the profile of consumers seen by mental health services in the SLHD match this profile?

Is the profile of consumers treated by the SLHD mental health service representative of the profile of consumers of public mental health services in Australia?

If so, what are the needs of these consumers in managing their mental health?

2.1 Methodology:

First it was important to establish whether the consumers of the SLHD mental health service were a representative sample of the national population (Saks & Alsop 2012). In order to determine whether consumers of the SLHD mental health service matched the profile of consumers of public metal health services across Australia a file audit was completed using archival data obtained from patient medical records.

Ethics approval was initially sought from the Concord Repatriation General Hospital (CRGH) Human Research Ethics Committee. The purpose was for analysis of health data to give a profile of the type of patient group most often seen in public mental health services. Approval was granted on 29 May 2013- Ethics Approval Number- CH 82/6/2013-086.

Random sampling techniques, such as equal probability selection methods produce representative samples (Peat et al. 2001). The sampling frame for this study was patients discharged from Concord Centre for Mental Health (CCMH) between 29 May 2012 and 29 May 2013 – a 12-month cross-sectional period.

Simple random sampling was used to select 50 files for auditing. Simple random sampling is an equal probability selection method ensuring that each member of the target population (defined here as the group of patients discharged between 29 May 2012 and 29 May 2013) has an equal chance of being selected.

Medical Records staff were requested to compile a list of the medical record numbers (MRNs) only of all discharges or patient separations from CCMH between 29 May 2012 and 29 May 2013. From that list, every third Medical Record Number was selected until 50 medical record files were extracted for auditing.

Fifty patient files were audited by the researcher in a small room on the top floor of the medical records building at CRGH. Having one auditor complete this process ensured consistency, accuracy and reliability in coding. The 50 medical records were audited manually over three consecutive Fridays (3 x 9 hour blocks). The files were manually audited because some of the data required in this study is not captured by Cerner or Powerchart, NSW Health databases but is contained in the medical record. The individual medical records for each consumer varied from one to seven volumes. Each volume was divided into the following sections: progress notes, assessment and MHOAT modules and legal and medication charts. Information about relationship status, employment and functional skills was obtained by a close audit of the progress notes.

The data categories and groups required for the audit were generated from the Australian Institute of Health and Welfare AIHW (2013) paper. Frequency analyses, graphs and tables of the data gathered were completed. Human resources were able to provide numbers as to the distribution of mental health staff according to medical, nursing and allied health groupings. Simple ratio analyses were completed.

2.2 Results:

2.2.1 Age on First Admission

The most common age group for first admission for both females (60%) and males (55%) was between 21 and 30 years.

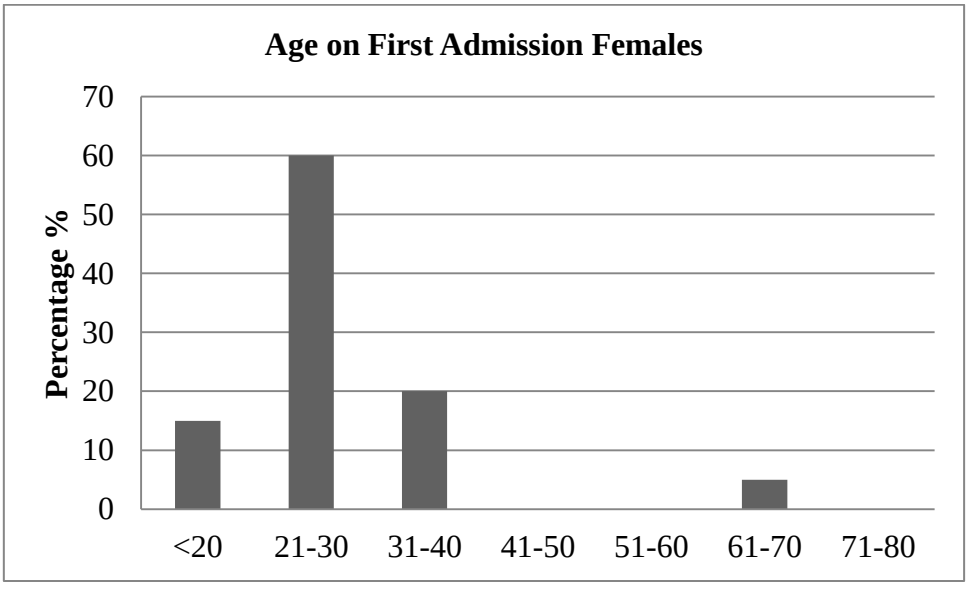


Figure 1.1: Age on first admission females

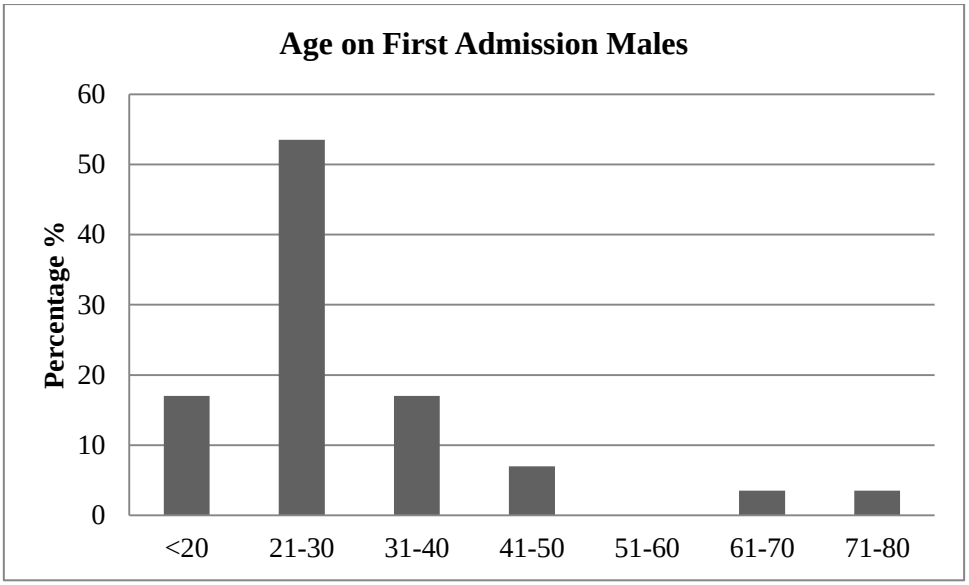


Figure1.2: Age on first admission males

2.2.2 Average Age of First Admission

The cross sectional sample of 50 patient medical records indicated that the average age of first admission for males was about 34 years and for females 37 years. This is consistent with the national data. About 80 percent of female admissions are between 21 and 40 years; about 70 percent of male admissions are between these ages.

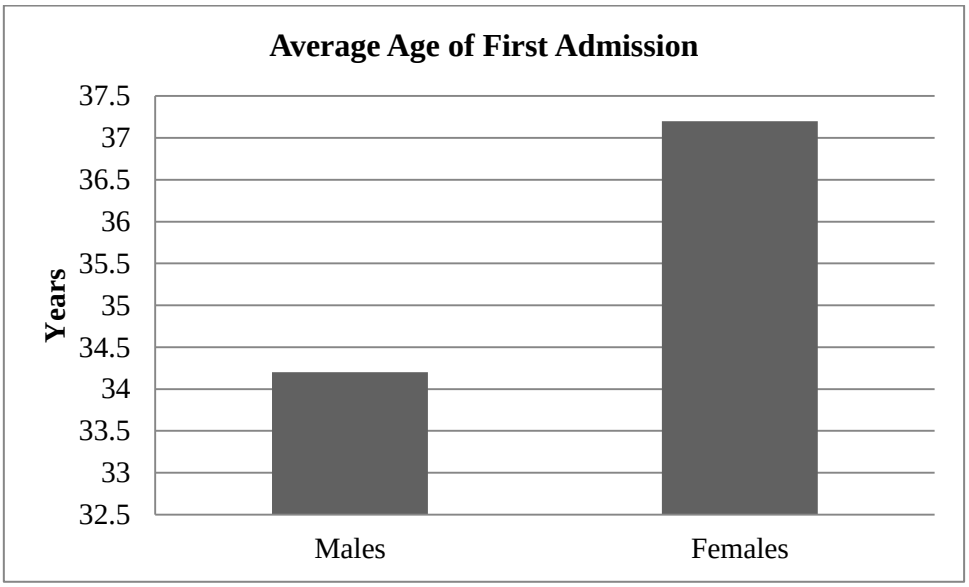


Figure 1.3: Average age of first admission

2.2.3 Gender

In terms of gender, 63 percent of patients were male and 37 percent were female.

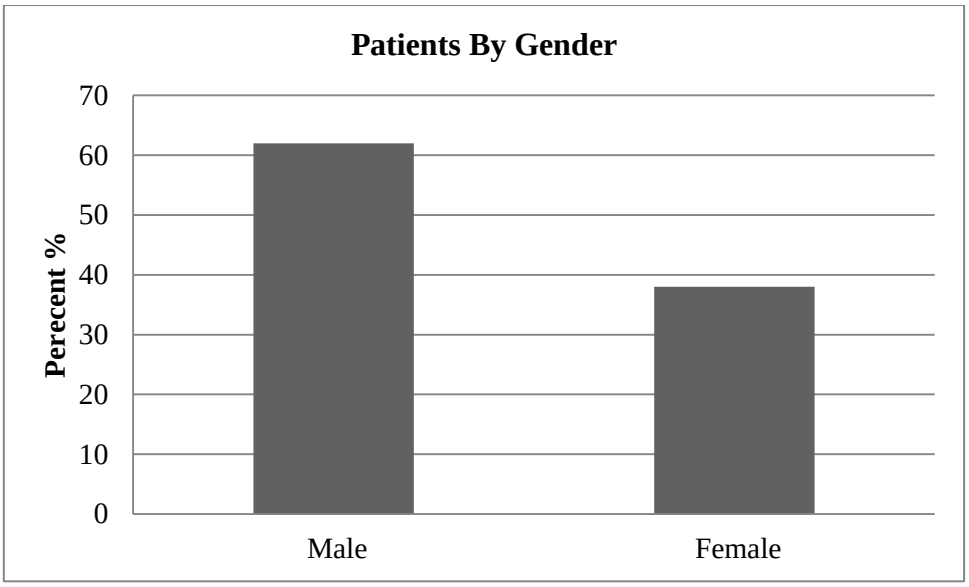


Figure 1.4: Patients by gender

2.2.4 Legal Status

The majority of patients were involuntary admissions. Seventy-three percent were involuntary admissions compared to 23 percent that were voluntary admissions. This is consistent with the national data suggesting about 70 percent of admissions are involuntary. An involuntary admission is also known as admission under schedule (Section 22) of the *Mental Health Act NSW 2007.*

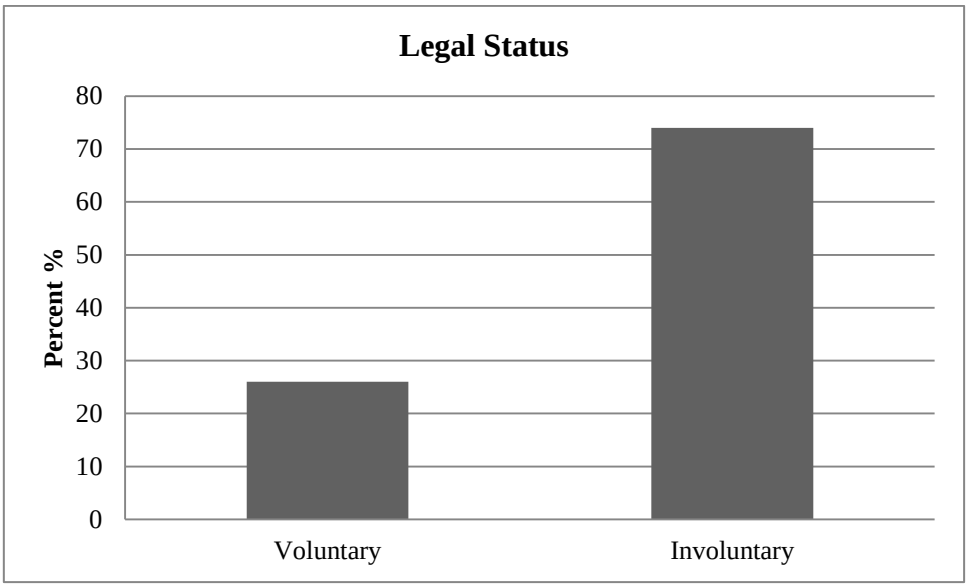


Figure 1.5: Legal status

2.2.5 Method of Admission

Involuntary patients were most frequently brought in by police or ambulance (60%). Some were brought in by family members concerned about their mental health or ambulance called by family or community mental health centre staff (21%). About 19 percent of consumers had self-presented asking for assistance due to concerns about their mental health.

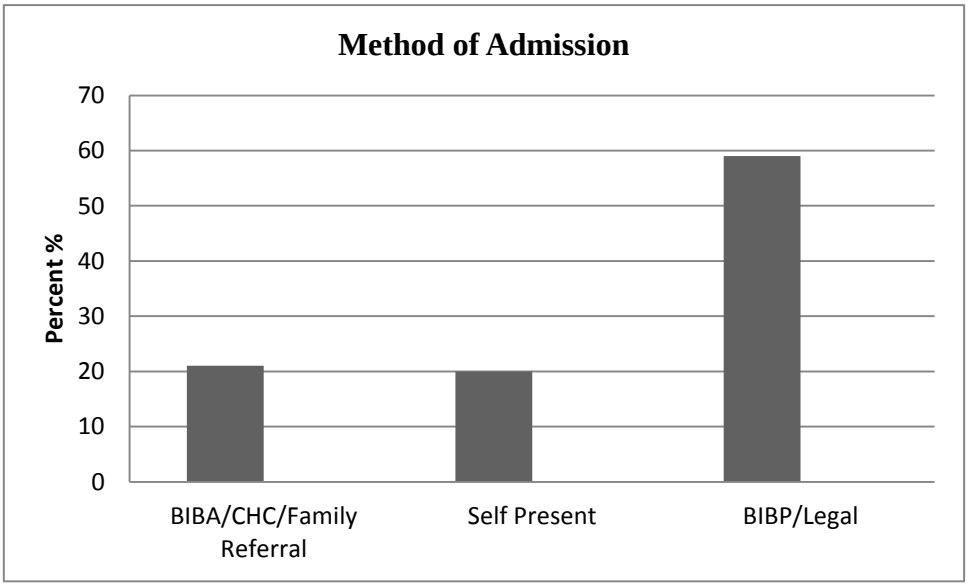


Figure 1.6: Method of admission

2.2.6 Axis 1

Patients were assessed and given a diagnosis using the DSM-5 classification system. Multiple diagnoses (referred to as comorbid conditions) were common. In terms of Axis I diagnoses 53 percent of the sample were given a diagnosis of schizophrenia or a psychotic disorder. Over 62 percent were also diagnosed with substance abuse disorder (alcohol and or other substances), 38 percent had a comorbid affective disorder (depression, bipolar or anxiety disorders), 10 percent were diagnosed with schizoaffective disorder and about 15 percent had cognitive impairment.

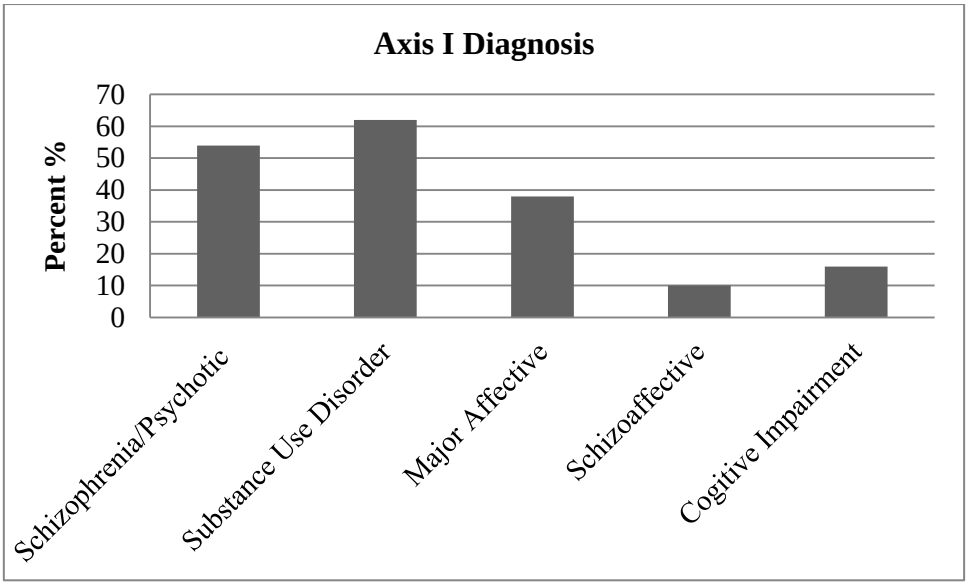


Figure 1.7: Axis I diagnosis

2.2.7 Axis II

In terms of Axis II, which is a diagnosis of a personality disorder, about 17 percent of the patients were diagnosed with comorbid antisocial personality disorder (ASD) and 23 percent with borderline personality disorder (BPD). Four percent were diagnosed with other personality disorders such as obsessive-compulsive personality disorder (OCPD), schizotypal personality disorder and avoidant personality disorder. ASD and BPD were the two major personality disorders most likely to cause individuals greater difficulties and bring them to the attention of police or mental health services.

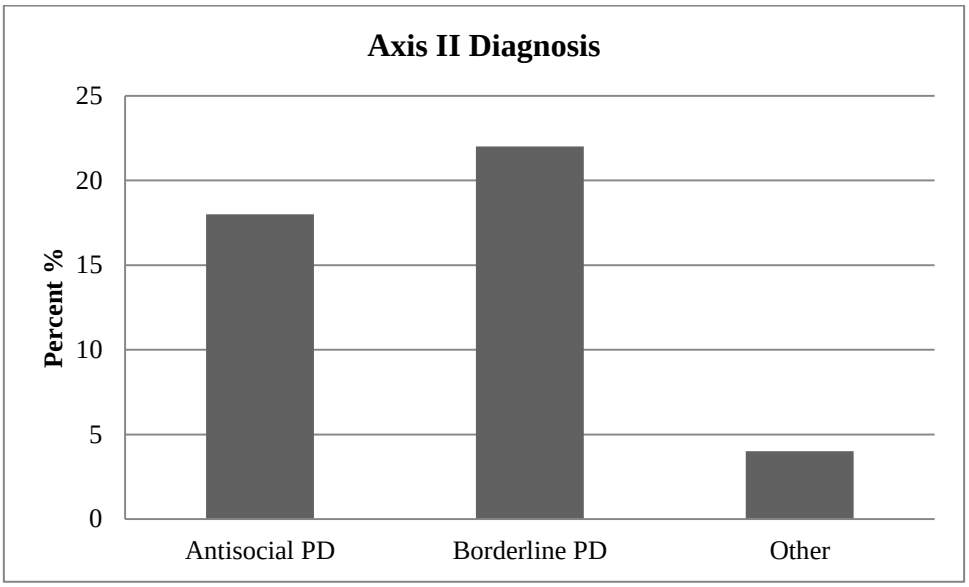


Figure 1.8: Axis II diagnosis

2.2.8 Axis III

Axis III is used to diagnose any comorbid medical conditions. On Axis III, about 23 percent of patients were diagnosed with metabolic syndrome (a term used to describe diabetes, heart and vascular conditions). Patients with mental illness have an increased likelihood of being diagnosed with metabolic syndrome due to the anti-psychotic medication they are prescribed. Approximately 13 percent had immune system disorders, 4 percent had epilepsy, 6 percent had Autism Spectrum Disorder (ASD) and 13 percent had other medical conditions including; cancer, kidney disease, skin conditions and dental problems.

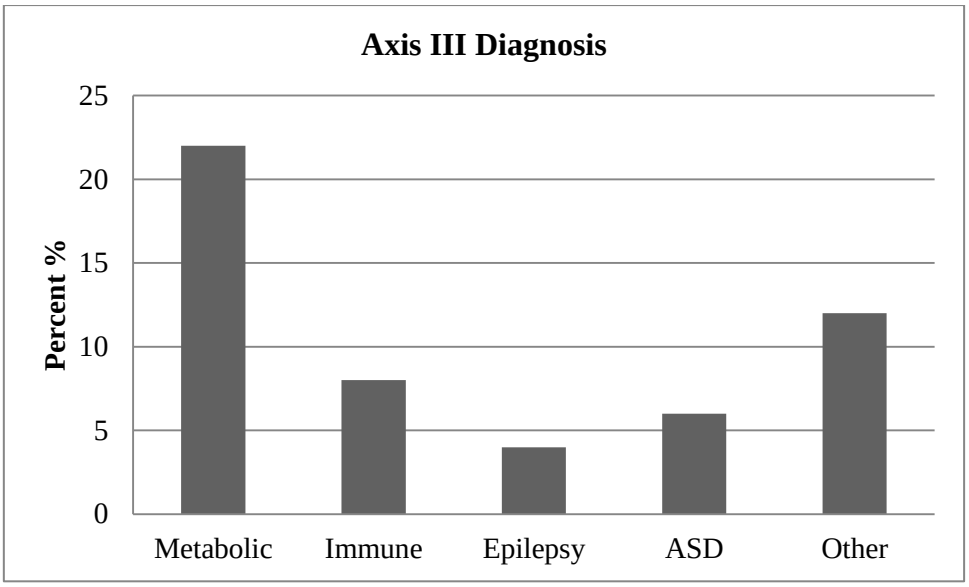


Figure 1.9: Axis III diagnosis

2.2.9 Axis IV

Axis IV is used to record any social conditions and difficulties. Not surprisingly and consistent with national data the patients in this sample reported significant social issues. About 97 percent reported relationship difficulties that included either a lack of intimate relationships, violence, lack of friends and loneliness.

Sixty-three percent reported accommodation difficulties, with the most common issue being lack of suitable and affordable accommodation. The second issue was lack of appropriately supported accommodation. Homelessness is a major concern for those with mental illness (AIHW 2013).

Sixty-three percent reported social difficulties, both a lack of social contact or problems with social situations such as not being able to access suitable social and community organisations. About 42 percent had difficulties with finding suitable employment and felt unsupported by their employers.

About 25 percent of patients reported legal difficulties. These included having committed an offence while mentally ill and being dealt with by the courts under a section 32 or section 33 *Mental Health (Forensic Provisions) Act 1990*.

Section 32 allows a magistrate to dismiss the charge and discharge the accused into the care of a responsible person subject to attending a hospital for assessment and treatment. Section 33 provides a mechanism for dealing with accused who are mentally ill persons within the meaning of the Act. Under s33, the magistrate may order police to take and detain the defendant in, a mental health facility for assessment s 33(1) (a). If not found to be mentally ill or mentally disordered brought back before the magistrate by police officers 33(1)(b) or discharge the defendant subject to conditions, into the care of a responsible person: s 33(1)(c).

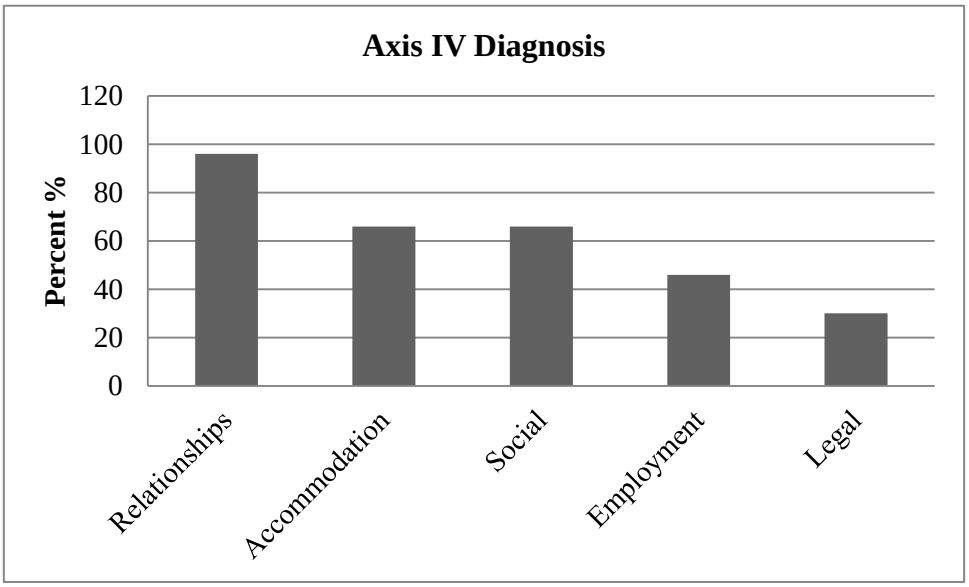


Figure 1.10: Axis IV diagnosis

2.2.10 Axis V

Axis V is a Global Assessment of Functioning (GAF) Scale. Patients' level of functioning at admission and again at discharge should be rated according to the GAF. The GAF is a numeric scale (0 through 100) used by mental health clinicians to subjectively rate the social, occupational, and psychological functioning of adults. Unfortunately, GAF scores could not be included here as there was inconsistent use of this measurement among mental health staff.

2.2.11 Relationship Status

In terms of relationship status, 68 percent of the consumers described themselves as single and had no children. Only 22 percent had a partner and children.

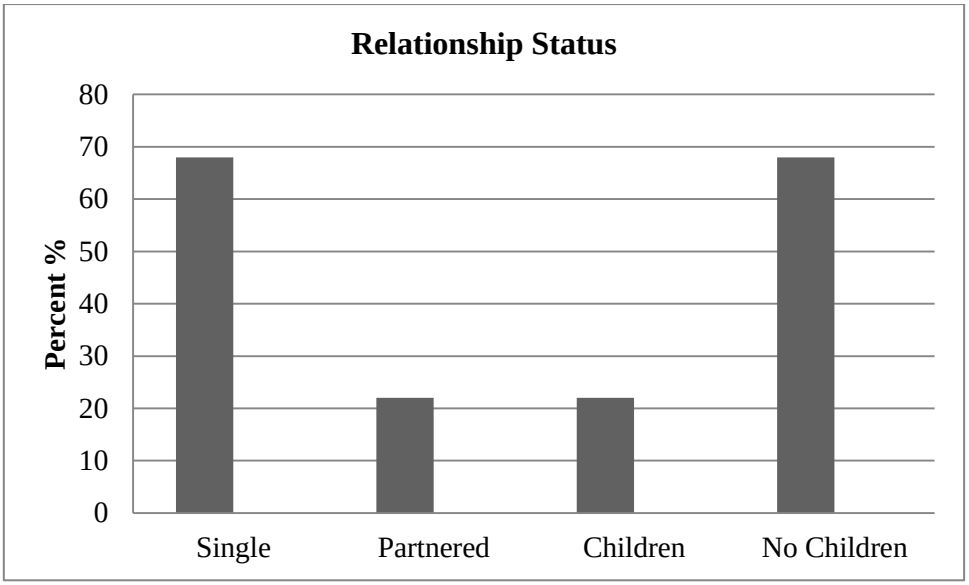


Figure 1.11: Relationship status

2.2.12 Employment

Employment is a major concern for those diagnosed with mental illness. About 49 percent were in receipt of a Disability Support Pension (DSP), a further 34 percent were on Centrelink benefits and about 27 percent were employed. This figure included any type of employment (including disability-supported employment) as well as casual, part-time and full-time work.

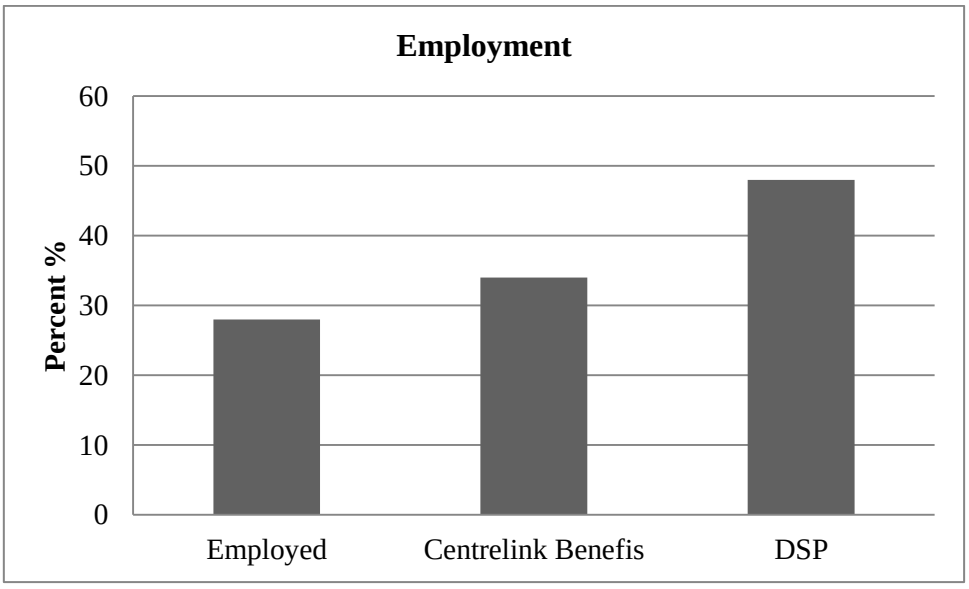


Figure 1.12: Employment

2.2.13 Risks

The major risks associated with an involuntary admission to a psychiatric facility included risk or harm to self and/or others. On admission, 54 percent of the patient group had a history of prior assault or violence and were violent on admission, 41 percent were suicidal and 46 percent had a history of self-harm. Admission to an inpatient psychiatric facility is a critical time for both patients and staff. The risk to staff of physical assault is high.

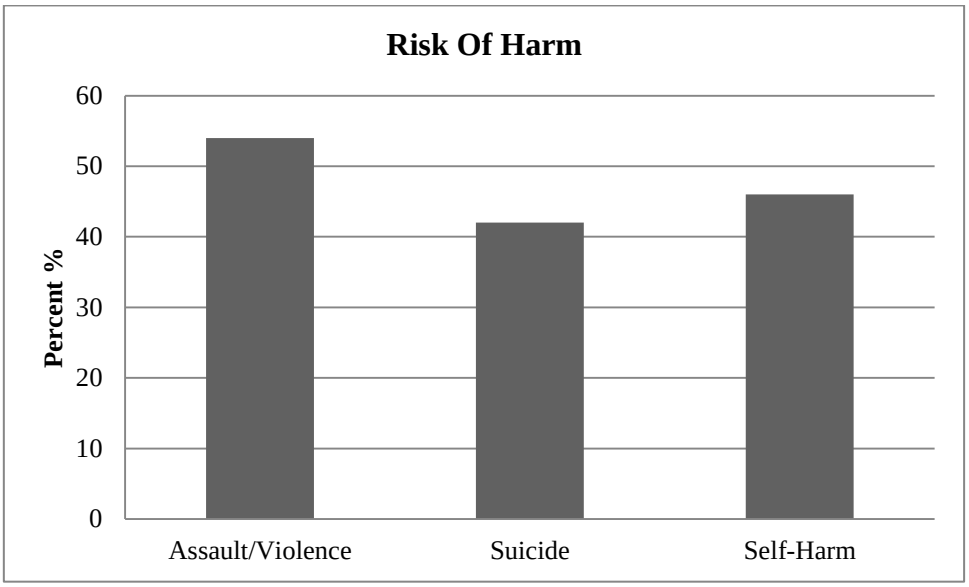


Figure 1.13: Risk of harm

2.2.14 Admission Rates

Of the 50 patients in the sample, there were 224 admissions between them with an average 4.4 admissions. Admission lengths ranged from 1 day to 930 days (32 months). The average length of stay was 50.2 days due to several very lengthy admissions of up to 32 months. These outliers are usually removed from national data, which records acute admissions only (AIHW 2013). Long stay patients fall into two groups. The first group is a cohort of patients with complex needs that are difficult to place in community settings. The second group is comprised of patients who are under forensic orders and are managed under the *Mental Health (Forensic Provisions) Act 1990*. This group of patients have been charged with an indictable offence and found to be not guilty by reason of mental illness (NGMI). Concord Centre for Mental Health has long-stay rehabilitation wards where consumers can be hospitalised for two years or more as well as a seven bed low secure forensic pod.

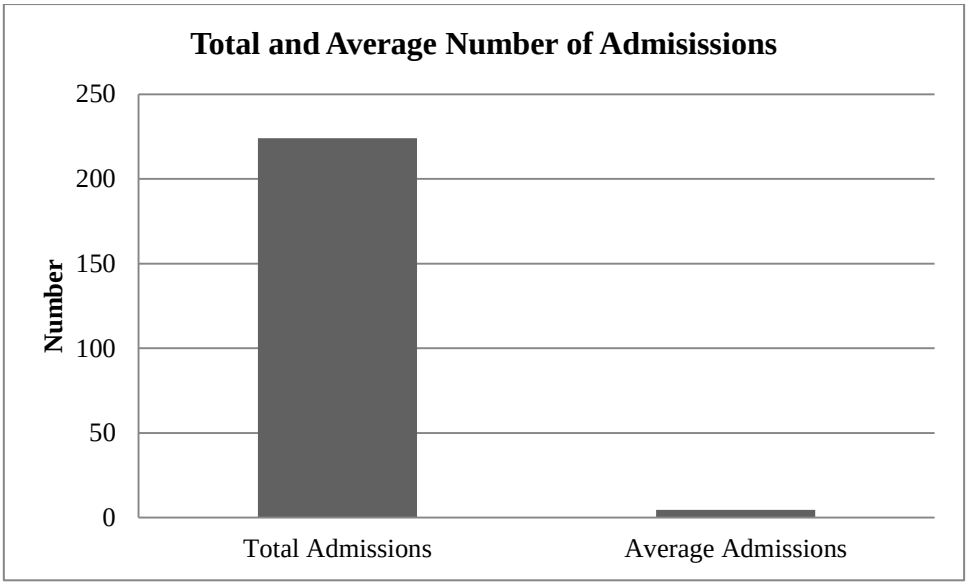


Figure 1.14: Total and average number of admissions

2.2.15 Method of Discharge

Patients discharged from inpatient psychiatric units are most likely to be discharged to the care of a community mental health centre (CHC) for follow-up care. About 80 percent of patients were discharged to CHCs in the SLHD while 15 percent were discharged to a private psychiatrist or psychologist and a further 11 percent were discharged to their general practitioner under shared care models of treatment.

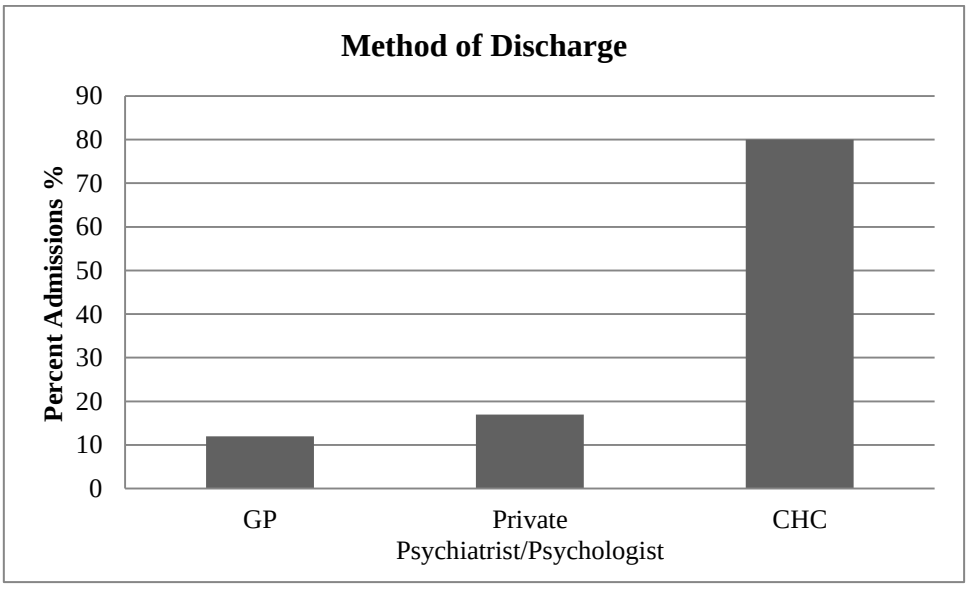


Figure 1.15: Method of discharge

2.2.16 Community Treatment Orders

Approximately 42 percent of patients were discharged on a community treatment order (CTO) and 58 percent were not discharged under CTO conditions. National data suggest that one in seven patients/consumers are discharged on a CTO, approximately 15 percent. However, there is significant variation across health districts and states in the use of CTOs (AIHW 2013). It is quite conceivable that rural LHDs do not use CTOs as frequently as urban LHDs because they do not have enough staff to monitor patients and respond to breaches of CTO conditions. Patients in urban areas can become lost to follow-up care due to urban density, mobility and movement across LHDs thereby necessitating discharge on a CTO.

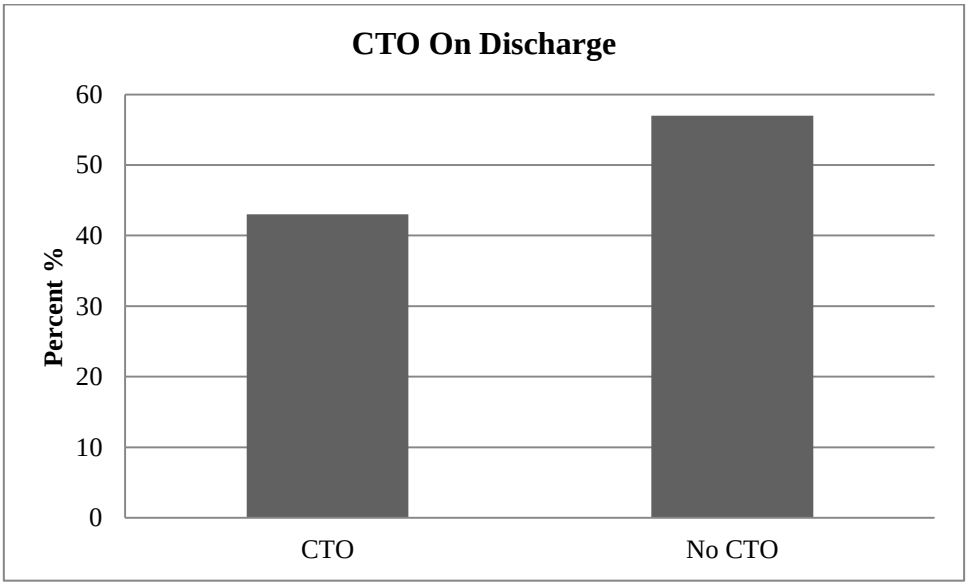


Figure 1.16: CTO on discharge

2.2.17 ALOS

The ALOS for patients of the SLHD mental health service was 70 days. However, Concord Centre for Mental Health (CCMH) is comprised of 56 acute admission beds and 102 long stay beds. These include 12 quaternary adolescent beds, 24 community relapse (ALOS >30 days), 7 forensic beds, 24 rehabilitation (up to 2 years), 15 acute recovery beds (ALOS >60 days), and 30 psychogeriatric beds. When bed occupancy data from patients admitted to these long stay units were excluded, ALOS was 15.6 days.

2.3 Summary

The profile of consumers of the SLHD mental health service matched the profile of consumers of public mental health services nationally. The primary diagnosis was schizophrenia/psychotic disorder (53%) with a further ten percent diagnosed with schizoaffective disorder. The most common comorbid diagnosis was substance abuse disorder (62%).

More males accessed the SHD mental health service than females and the majority of consumers were between the ages of 21- 40 years. Seventy-three percent were involuntary admissions. The national data indicated about 15 percent are discharged on a CTO while the SLHD CTO discharge rates were higher. They were 42 percent. ALOS nationally was between 12.6-18 days while in the SLHD mental health service it was higher due to lengthy hospitalisations on long-stay units. The data was adjusted by removing the long-stay patients. The ALOS in the SLHD acute admission units was 15.6 days. This is consistent with the national data.

The identified needs of consumers of the SLHD public mental health service were the same as those for consumers of mental health services nationally and included difficulties in the following domains; psychosocial, interpersonal, financial, legal, vocational, educational and functional.

Appendix 4 Evidence-based Care Literature Summary

What is Evidence-Based Treatment and Care for Schizophrenia?

"There is no health without mental health" (Prince et al. 2007, p.859). Yet for years, the healthcare sector has separated physical health from mental health with the vast majority of public funds being spent on treatments for physical illnesses (Mechanic 2017). Evidence-based, clinically effective and efficacious care for mental illness has been difficult to achieve (Andrews et al. 2000; Druss et al. 2001; Kohn et al. 2004; Kupfer 2005; Lewis et al. 1999). Many individuals with mental illness still receive no treatment, treatment of uncertain value or treatment that stops at pharmacotherapy (Slade et al. 2007). Much more is required (Katz et al. 1997).

There is a plethora of research on the treatments available for people diagnosed with mental illness (Berry & Haddock 2008). For the purpose of this section, the review has been narrowed down to examine evidence-based care for those consumers who are treated and managed by public mental health services. A profile of these consumers indicates that the majority have a diagnosis of schizophrenia (or psychotic illness), require accommodation, financial, medical, pharmacological, psychosocial and psychological interventions and support. The literature has been condensed in an attempt to address each of these domains.

Accommodation

In a review of the literature on accommodation, Shean (2009) recognised the importance of access to stable and safe accommodation in achieving positive outcomes for treatment and recovery from schizophrenia.

Financial

Andrews and colleagues (2003) found that current approaches to the treatment of schizophrenia cost about $AU200, 000 per years lived with disability. Yet optimal treatment that would consist of evidence-based interventions could increase the number of YLDs averted by 66%.

Medical

While electroconvulsive therapy (ECT) is a contentious intervention, the use of ECT has been associated with marked improvement in global functioning and rapid reduction of symptoms in schizophrenia and major depressive disorder (Tharyan & Adams 2009). A Cochrane review of 26 randomised control trials (RCTs) and 50 reports concluded that the evidence suggests ECT combined with antipsychotic drugs is an option for individuals who show little improvement with medication alone (Tharyan & Adams 2009). Optimal treatment for individuals diagnosed with mental illness should also include regular blood screens, weight measurement and metabolic testing (Margison 2003). Evidence should come from systematic randomised control trials and not just expert and user opinion (Bryman 2015).

Pharmacological

Psychiatrists have stated they still do not know the indication for one antipsychotic versus another or even which antipsychotic will be better for any individual patient (Davis & Leucht 2008). Asenjo Lobos and colleagues (2010) reviewed 27-blinded RCTS to determine the effects of clozapine compared with other atypical antipsychotics for schizophrenia and concluded that clozapine was a little more efficacious than zotepine and risperidone but tended to have effects that are more adverse.

Shek and colleagues (2010) found inconclusive evidence on the effectiveness of beta-blocker supplementation of antipsychotics in the treatment of people with schizophrenia. Marriot and Waddington (2010) found that while antipsychotic medication is widely used for elderly people with schizophrenia there is still no evidence to suggest which antipsychotics are most effective and therefore should be prescribed. Villeneuve and colleagues (2010) found a higher drop-out rate from pharmacotherapy studies (on average at 42%) than from psychosocial treatment (13 %).

Combs (2011) found that 25% to 60% of people continue to have persistent positive and negative symptoms despite medication. They also found that medication noncompliance rates are between 50% and 75%. They argued for a multi-faceted approach to the treatment of psychosis, that comprised a combination of antipsychotics and CBT. Malhi and colleagues (2010) found that evidence-based guidelines in treating those patients who were complex and presented with multiple co-morbidities were of limited value. They found that "real world" treatment of this cohort of patients largely consisted of on average 3.4 psychotropic medications in total. Sungur and colleagues (2011) reviewed medication compliance and basic case management compared with optimal case management which included supportive psychotherapy, minimal doses, psychoeducation, anger management and substance use counselling and found the latter more successful. They concluded medication compliance is optimised when adjunctive psychological interventions are used.

Barnes (2011) argued for the development of evidence-based guidelines for pharmacological treatment of schizophrenia. Leucht et al. (2012) reviewed 65 studies to test the efficacy of antipsychotic drugs for relapse prevention and found strong support for maintenance treatment with antipsychotic drugs for schizophrenia. However, Addington and McKenzie (2012) found that adherence to evidence-based treatment recommendations in schizophrenia ranged from 58% to 90 % for pharmacological interventions. Similarly, Unger (2012) found significant departure from dosing recommendations. Chakrabarti and colleagues (2012) found little evidence to support the use of PRN ("as needed") medication for psychiatric inpatients. They concluded that the use of PRN medication in psychiatric facilities was driven by habit and clinical experience rather than empirical evidence.

Gadelha and colleagues (2012) found that first and second-generation antipsychotics are similarly effective in the treatment of psychotic symptoms but they cautioned that although symptomatic control is essential, the main treatment goals should be improved functional recovery and social reintegration. They concluded that medication alone could not achieve

these goals. Kroken et al. (2012) found the use of antipsychotic monotherapy reduced the risk of readmission by 74.9%. Tsoi, Porwal and Webster (2013) reviewed 34 trials of pharmacological interventions to help individuals with schizophrenia stop or reduce smoking. They found that Bupropion was effective in reducing smoking rate in the short term. Tani and colleagues (2013) argued for a switch from polypharmacy to monotherapy in the treatment of schizophrenia.

In summary, the literature suggests that monotherapy is more effective in reducing readmission rates; pharmacotherapy is important for symptomatic relief and control but the treatment of psychosis requires a multi-faceted biopsychosocial approach.

Psychosocial

Researchers have argued that despite there being an evidence base for psychosocial interventions most consumers do not receive holistic mental healthcare (Lehman 2010; Lehman et al. 2010; Lehman & Steinwachs 2003). Psychosocial interventions integrated with psychopharmacological strategies have been shown to be most effective in helping individuals recover (Corrigan 2006). The most effective interventions combine symptom stabilisation and management, employment, assertive community treatment, family interventions and therapies and drug health services (Shean 2007). These interventions are recovery-focused (Kelly & Gamble 2005). Kreyenbuhl and colleagues (2012) reviewed over 600 studies and recommended psychosocial interventions related to smoking cessation, substance use and weight loss in addition to pharmacological treatment. Segredou and colleagues (2012) recommended group psychosocial interventions, in particular psychoeducation and CBT.

Psychological

(a) Supportive Therapy

Supportive therapy alone is often used in everyday clinical care with consumers with schizophrenia. However, the literature suggests combining supportive therapy with CBT is more effective (Penn et al. 2004; Hazell et al. 2016). Turkington and colleagues (2006) found that training mental health nurses in CBT was more effective than supportive counselling alone. Velligan (2009) also found CBT to produce more effective outcomes than supportive therapy alone. Consumers who received CBT were more likely to report being satisfied with care than those who received supportive counselling alone. A Cochrane review of supportive therapy identified 21 studies and found no significant differences between supportive therapy and standard care (Buckley, Pettit & Adams 2010).

(b) Psychoeducation

A review of 44 trials found that psychoeducation in combination with pharmacotherapy reduced relapse and readmission rates and encouraged medication compliance (Xie, Merinder and Belgamwar 2010). Similarly, a combination of psychoeducation; medication management and cognitive therapy was found to produce the lowest rates of relapse in a one year-follow-up study of consumers with schizophrenia and their families (Davis & Leucht

2008). Short psycho-education groups were also found to reduce both positive and negative symptoms of schizophrenia (Lawrence, Bradshaw & Mairs 2006; Murray-Swank & Dixon 2004

(c) Cognitive Behavioural Therapy

The use of Cognitive Behavioural Therapy (CBT) has been explored extensively (Birchwood et al. 2011; Grawe et al. 2006 Jones et al. 2013; Jung & Newton, 2009; Tai & Turkington 2009; Turkington et al. 2006). A comparison of CBT with compliance therapy, personal therapy, acceptance and commitment therapy (ACT) and supportive therapy found CBT had the strongest evidence base (Dickerson & Lehman 2011). Turkington and colleagues (2007) found support for the use of CBT as an adjunct to antipsychotic medication in the treatment of people with schizophrenia. Various components of CBT have also been studied (Morrison & Barrett 2010). Relaxation training has been found to be effective (Rickard et al. 1993). However, little evidence has been found to either endorse or refute problem-solving skills training (Xia & Li 2012). Group CBT was also found to be effective (Lawrence, Bradshaw & Mairs 2006). Birchwood and colleagues (2011) recommended that cognitive therapy for people with psychosis should focus on individuals' appraisals, behaviour and affect and not necessarily on symptoms.

(d) Psychodynamic Therapies

A meta-analysis on the efficacy of individual psychodynamic psychotherapy found support for this intervention (Gottdiener 2006). Yet other studies have found little support for the use of individual or group psychodynamic psychotherapy for inpatients with schizophrenia (Malmberg, Fenton & Rathbone 2012). Brus, Novakovic and Friedberg (2012) concluded that after reviewing the evidence base for four psychotherapeutic adjuncts to the pharmacological treatment of schizophrenia they found a significant evidence base for interpersonal therapy, CBT and cognitive enhancement therapy but there was a paucity of research on psychodynamic treatments for schizophrenia.

(e) Family Intervention/Therapy

A review of 53 randomised control trials (RCTs) found family interventions improved general social impairment and the levels of expressed emotion within the family (Pharaoh, Mari & Streiner 2010). The greatest impact of family interventions was on reduction of relapses and hospitalisations (Asmal et al. 2011). Studies have also have found that cognitive-behavioural family therapy achieved better clinical outcomes than pharmacotherapy and case management alone for recent-onset schizophrenia (Grawe et al. 2006; Luckstead et al. 2012; Wilkie 2007). However, family interventions and therapies are under-utilised by mental health services (Brent & Giuliano 2007). Towey (2011) argued for more advanced family work in the treatment of people with schizophrenia.

Other Therapies

Various other therapies have been used to treat schizophrenia with variable success. Little evidence has been found for the use of hypnosis (Izquierdo de Santiago & Khan 2012) or acupuncture with schizophrenia (Rathbone & Xia 2012). Similarly, there is little evidence to

support the use of drama therapy to keep inpatients engaged in treatment (Ruddy & Dent-Brown 2009). The results from 61 reports and studies on the use of art therapy with consumers with schizophrenia were inconclusive although the majority of consumers reported high satisfaction and enjoyment levels of such interventions (Ruddy & Milnes 2009).

A Cochrane review on the effectiveness of ayurvedic medicine in the treatment of schizophrenia was inconclusive (Agarwal, Abhijmhan & Raviraj 2010). Little evidence was found to support the use of dance therapy (Xia & Grant 2012) or morita therapy (He & Li 2007). The use of (CTOs) made little difference in service use, social functioning or quality of life compared with standard care (Kisely, Campbell & Preston 2012).

Conclusions

The literature suggests that the most effective treatment for consumers with schizophrenia is an evidence-based approach that combines pharmacotherapy with psychological and psychosocial interventions, referred to as holistic healthcare (Fenton 2000; Fenton & Schooler 2000). However, many standard public mental health services do not offer the full range of evidence-based treatments to consumers (Drake et al. 2001; Williams 2015). The majority of individuals with schizophrenia do not receive evidence-based care despite the fact that evidence – based treatment guidelines have been developed (Drake, Bond & Essock 2009; Gaebel et al. 2005; Gaebel & Riesbeck 2008; Gaebel, Reisbeck & Wobrock 2011). Even when evidence-based treatments are offered, fidelity to treatment standards is problematic. Without fidelity to treatment standards, the desired outcomes cannot be achieved. Falloon and colleagues (2004) have argued that despite considerable knowledge about evidence-based interventions, few services have moved beyond the medical model with its focus on symptom management. Many have called for an integrated model of care (Carpenter et al. 2004; Stovall 2007).

Individuals with schizophrenia do not ordinarily have access to psychological interventions (Berry & Haddock 2008) often due to caseload and productivity requirements (Sullivan et al. 2009). Klingberg and Wittorf (2012) have argued that psychosis psychotherapy does not have an evidence problem but an implementation problem. They and others have called for an evidence-based approach to treatment that combines pharmacotherapy with psychosocial and psychological interventions (Addington & McKenzie 2012; Riggs, Wiltsey-Stirman & Beck 2012; Vieta 2010; Ziedonis et al. 2005).

Appendix 5 Research Paradigms

1. Ontology

The word ontology is derived from the Greek words 'ontos' or being and 'logos' meaning study (Scotland 2012). Hence, ontology is concerned with the study of being. Ontological questions attempt to make discoveries about the real world. They are concerned with what constitutes reality (Crotty 1998, p.10). Research is driven by 'how things really are' and 'how things really work' (Guba & Lincoln 1994, p.108). Most ontological questions begin with the word 'what'.

The types of questions that ontology attempts to answer are: what is a tumour; what is a safe aircraft plan; or what is the Milky Way? Ontology is mainly concerned with proving whether phenomena exist or not. Ontology also tries to identify similarities, relationships and differences between objects that are real. Ontology does not concern itself with questions about matters of an aesthetic or moral nature. These are said to fall outside the parameters of legitimate scientific inquiry (Guba & Lincoln 1994).

Epistemology is derived from the Greek words "episteme that means knowledge and logos that means study" (Cohen, Manion & Morrison 2007, p.7). Epistemology is about the study of different types of knowledge and its true meaning. There are two parts to knowledge. There is the nature of knowledge and the limits of knowledge. The nature of knowledge is concerned with understanding when an individual knows or does not know about an object or an event. The limit of knowledge is concerned with understanding whether knowledge is limitless (Scotland 2012).

2. Epistemology

Epistemology is said to comprise five different types of knowledge. They are empirical, non-empirical, propositional, individual and collective knowledge (Scotland 2012). Empirical knowledge is objective and acquired through direct experience. For example, when an individual places her hand in a fire and states fire is hot, it is a fact based on reality and experience. Conversely, non-empirical knowledge is based on reasoning. Hence, when an individual, who has never visited The Maldives, states they are hot, she reasons that as the islands are near the equator and they receive significant sunlight, therefore they are hot. Propositional knowledge, also referred to as declarative knowledge refers to knowledge that can be encoded in language, is factual and from different fields. This is different to knowledge that cannot be encoded in language, such as learning to play a violin. Individual knowledge refers to what an individual claims to know. Collective knowledge as its name suggests refers to knowledge that is known by a group of people (Scotland 2012).

According to epistemology, knowledge exists in an individual's mind. If an individual does not believe in the existence of a particular phenomenon then (s)he cannot have knowledge of it. Additionally, the belief must be a true belief. It must be based on fact, evidence and sound reasoning. Only then can it be considered knowledge. Anything less does not constitute real knowledge. Speculation is not knowledge as it is not based on fact, evidence or reasoning.

Epistemological questions are concerned with knowledge creation, acquisition and communication. Epistemology focuses on "the nature of the relationship between the would-be knower and what can be known" (Guba & Lincoln (1994, p.108).

Every research paradigm will make certain ontological and epistemological assumptions. These assumptions are the starting point in all research. This means that there are different assumptions about reality and knowledge that underpin each research paradigm. The methodology and methods selected by the researcher reflect this (Scotland 2012).

3. Methodology

Methodology is the systematic plan that determines the selection and use of particular research methods (Crotty 1998. p. 3). There are four components to research methodology. They are design, sampling, data collection and data analysis. Research design specifies from which group data will be collected, when and how. Sampling refers to identifying the target population from which data will be collected or an intervention performed. Data collection describes the instruments to be used and the procedures to collect data. Data analysis is about the appropriateness of the selected procedures for analysing the data and answering the research questions. Methodology is how the "inquirer goes about finding out whether whatever they believe can be known" (Guba & Lincoln 1994, p.108). Methodology is not the same as method. Method is a research tool. Methodology is the justification for using a particular method.

4. Methods

Methods are the tools used for data collection and analysis (Crotty 1998). Methods may be quantitative, qualitative or mixed. Quantitative methods emphasise objective measurement and the statistical or numerical analysis of data (Vaismoradi, Turunen & Bondas 2013). Qualitative methods are primarily exploratory and used to uncover meaning and generate theory (Vaismoradi, Turunen & Bondas 2013). Mixed methods research involves integrating quantitative and qualitative methods in a single study (Crotty 1998). All research commences with an ontological position, moves into epistemological assumptions and a methodology. A different combination of any of these leads to a different method for exploring the same phenomenon (Grix 2010, p. 64).

5. Positivism and Objectivism

The ontological position of positivism is realism. Realism holds that objects exist independently of the researcher (Cohen, Manion & Morrison 2007). Positivists believe the world is external, reality is not mediated by our senses and there is a single objective reality. Research is focussed on discovering this reality (Carson & Kuipes 1988). Positivists take a systematic approach to all research. They start with a clearly defined research question, develop appropriate hypotheses and research methodology. Research questions or hypotheses are objectively investigated or tested so that the findings are deemed both reliable and valid (Carson et al. 2001). Positivists view the researcher and the researched as independent entities. One does not influence the other and no relationship exists between the two.

Meaning resides in objects and not in the mind of the researcher (Crotty (1998). Positivists look for causes and relationships between objects (Creswell 2009). They argue good research is reliable and easily replicated.

However, positivism does have its limitations. The techniques used to understand the real world are not as useful in research that attempts to understand the social world. The major criticism of positivism is that it is reductionist. Positivism attempts to reduce complex phenomena by simplifying and controlling variables (Scotland 2012). This does not work well in social research where isolating variables can be difficult and sometimes impossible. Human behaviour is complex and challenging to study. The same behaviour in 10 individuals may be the result of any number, or combination of internal and external drivers. Scientific explanations of human behaviour are rarely complete (Berliner 2002, p. 20). Behaviours need to be understood from the individuals' perspectives.

6. Interpretivism and Constructivism

Interpretivism holds that multiple realities exist (Hudson & Ozanne 1988). These multiple realities are constantly influenced by other systems. This means realities are not fixed (Neuman 2000). Interpretivists argue knowledge is "socially constructed" and perceived "rather than objectively determined" (Carson et al. 2001, p.5). Unlike positivists, interpretivists adopt more personal and flexible methods in order to explore meaning in social research (Black 2006). Interpretivists believe that there is a relationship of interdependence between the researcher and the researched. They interact and collaborate with each other making research more dynamic and fluid (Hudson & Ozanne 1988).

Throughout the research, the researcher maintains openness to new knowledge. Interpretivists believe that humans are adaptable and so is knowledge. Social realities are context bound and hence meaning can change depending on situation, time and place (Hudson and Ozanne 1988). Interpretivist researchers seek to uncover the meanings in human behaviour. They are not concerned with discovering cause and effect relationships or being able to generalise their findings (Neuman 2000; Hudson & Ozanne 1988). Their focus is on the subjective experience of individuals and making sense of how reality is perceived (Carson et al. 2001). The ontological position of interpretivism is constructivism.

Constructivism or relativism is the belief that reality is subjective and different for each individual (Guba & Lincoln 1994, p. 110). Constructivists hold that there is not a single reality. There are multiple realities. These realities are mediated by our senses. Language and consciousness shape and transform our reality (Frowe 2001, p. 185). Thus, reality is constantly being constructed through an iterative and interactive process. The epistemological position of interpretivism is one of subjectivism. The subjectivist position is "that the world does not exist independently of our knowledge of it" (Grix 2010, p. 83). Meaning is not discovered. Meaning is constructed as the internal world of the individual interacts with the external world (Crotty 1998, p. 44).

Interpretivists try to bring the unconscious into the open. They seek to understand phenomena from the individual's perspective, the interactions between individuals as well as from the

historical and cultural perspectives that shape individuals (Creswell 2009, p. 8). Human experience is not reduced to simple cause and effect relationships. Layers of meaning are uncovered and phenomena are described in rich detail. Interpretive theory is inductive. The theory is generated from the data. It does not precede the data (Cohen, Manion & Morrison, p. 22). The research aims to provide credible and justifiable answers to the research questions (Neuman 2000).

Appendix 6 SurveyMonkey Survey Pack

Welcome

STUDY TITLE: What is the role of allied health in the future of the public sector mental health service?

INVESTIGATOR: The research is being conducted by Lil Vrklevski, Director Psychology SLHD: Telephone Number 97678757 for the degree of Doctor of Philosophy under the supervision of Dr Kathy Eljiz and Associate Professor Angela Martin, School of Business, University of Tasmania.

INTRODUCTION:
You are invited to take part in a research study examining the role of allied health in the future of the public sector mental health service. This Participant Information Sheet will tell you about what is involved in the study and help you decide whether or not you wish to take part. Please read this information carefully. If there is anything you do not understand or if you feel you need more information about anything, please ask.

WHY HAVE I BEEN ASKED TO TAKE PART?
You have been invited to take part in this research because you are a staff member belonging to one of the five (5) professional groups most commonly represented in public sector mental health services.

WHAT IS THE PURPOSE OF THIS RESEARCH?
The purpose of the research is to explore how the different professional groups in the mental health service negotiate with each other in the provision of care to consumers.

DO I HAVE TO TAKE PART IN THE STUDY?
Taking part in any research is entirely voluntary. If you do decide to take part you can withdraw at any time without having to give a reason. Please be assured that, whatever your decision, it will not affect your relationship with the principal investigator or your relationship with the SLHD mental health service. If you decide to withdraw during the middle of the interview or at completion, the principal interviewer will erase the recording.

WHAT DO I HAVE TO DO
If you decide to participate, you will be required to complete a survey questionnaire and you may also be interviewed using a semi-structured interview protocol. The questions relate to your experiences of working in the mental health service as a member of a particular professional group. The survey questionnaire should take approximately twenty-five (25) minutes to complete. You will be invited to participate in an interview at the end of the survey questionnaire. If you choose to participate, the interviews will take approximately another thirty to forty five (30-45) minutes to complete. Interviews will be electronically recorded and later transcribed and scored. The interview questions will relate to your personal experiences and it is anticipated they should not cause any distress.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

While taking part in the study may not be of direct benefit to you the research study may further our knowledge about the provision of care to consumers of the mental health service and how the different professional groups negotiate with each other in the provision of care to consumers of the mental health service.

WHAT ARE THE RISKS OF TAKING PART?

There are no identified risks of taking part other than the time it will take to participate slightly increasing your workload.

CONFIDENTIALITY

By completing this survey you are agreeing to participate in this study. All details obtained by the principal investigator will remain confidential. Only Lil Vrklevski will have access to the questionnaire data and the recordings and transcripts of the interviews. The data will be locked and stored in a secure location. A report of this study may be submitted for publication but individual participants will not be identifiable.

Click to begin survey

This study has been approved by the Human Research Ethics Committee - CRGH of the Sydney Local Health District LNR/15/CRGH/144; LNRSSA/15/CRGH/145; LNRSSA/15/RPAH/. If you have any concerns or complaints about the conduct of the research study, you may contact the Executive Officer of the Ethics Committee, on (02) 9767 5622.

This study has been approved by the Tasmanian Health and Medical Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote LNR/15CRGH/144-CH62/6/2015-123.

The conduct of this study at the Professor Marie Bashir Centre at RPAH and the Camperdown, Canterbury, Croydon, Marrickville and Redfern Community Health Centres has been authorised by the SLHD (RPAH Zone). Any person with concerns or complaints about the conduct of this study may contact the Research Governance Officer on (02) 9515 57899 and quote protocol number; X15-0273.

Demographics

1. Please select your **professional group**

- ◯ Nursing
- ◯ Occupational Therapy
- ◯ Psychiatry
- ◯ Psychology
- ◯ Social Work

2. What is the highest level of **education** you have completed?

- ◯ Higher School Certificate
- ◯ Bachelor Degree
- ◯ Postgraduate Certificate
- ◯ Postgraduate Diploma
- ◯ Masters Degree
- ◯ Professional Doctorate
- ◯ PhD

3. Please select your **age** group

- ◯ 20-30
- ◯ 31-40
- ◯ 41-50
- ◯ 51-60
- ◯ 61-70

4. Please select your **gender**

- ◯ Female
- ◯ Male

5. Please select whether you are employed in **inpatient** or **community** within the mental health service.

- ◯ Inpatient
- ◯ Community

6. Please indicate how many **years** you have been **employed** in the mental health service with your current employer.

- ◯ 1-5
- ◯ 6-10
- ◯ 11-15
- ◯ 16-20
- ◯ 21-25
- ◯ >26

7. Please indicate how many **years experience** in total you have in mental health.

- ◯ 1-5
- ◯ 6-10
- ◯ 11-15
- ◯ 16-20
- ◯ 21-25
- ◯ >26

Professional Identity

We are interested in how you feel about being a member of your professional group. Please select the response that provides your level of agreement to each statement.

Please rate each item from 1 (Strongly Disagree) to 7 (Strongly Agree)

8. Professional Identity

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. I feel like I am a member of this profession	○	○	○	○	○	○	○
b. I feel I have strong ties with members of this profession	○	○	○	○	○	○	○
c. I am often ashamed to admit that I am a member of this profession	○	○	○	○	○	○	○
d. I find myself making excuses for belonging to this profession	○	○	○	○	○	○	○
e. I try to hide that I am a member of this profession	○	○	○	○	○	○	○
f. I am pleased to belong to this profession	○	○	○	○	○	○	○
g. I can identify positively with members of this profession	○	○	○	○	○	○	○
h. Being a member of this profession is important to me	○	○	○	○	○	○	○
i. I feel I share characteristics with other members of this profession	○	○	○	○	○	○	○

Power Relationships

The next five questions (9-13) will ask you about your perception of the power held by each of the 5 professional groups in the mental health service. Each question has 11 (a-k) sub-questions.

You will be asked the same questions about the following different professional groups.

1. Nursing
2. Occupational Therapy
3. Psychiatry
4. Psychology
5. Social Work

You are being asked the same questions about the different groups because we are interested in your perception of the power held by each professional group.

Please complete the questions for each professional group.

Power Relationships

The statements on this page will ask you about your perception of thepower held by nurses. Please indicate your level of agreement with each statement.

Please rate the extent to which you agree or disagree with each statement in relation to the nursing profession.

9. Power relationships and nursing

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment (money, goods, services, etc.)	○	○	○	○	○	○	○
b. Generally this occupational group has the ability to apply coercive force when making decisions.	○	○	○	○	○	○	○
c. In this organisation, employees of this occupational group can influence decisions about material resources.	○	○	○	○	○	○	○
d. Generally, this occupational group uses its social influence (on reputation, prestige, etc., through media, etc.) to obtain its will.	○	○	○	○	○	○	○
e. This occupational group has input when making decisions about material resources.	○	○	○	○	○	○	○
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
g. When making decisions about material resources employees of this occupational group actively influence their superiors.	○	○	○	○	○	○	○
h. Generally this occupational group uses access to formal processes to obtain its will (legal, professional association, etc.)	○	○	○	○	○	○	○
I. Generally, I interact with members of this occupational group on a professional level only.	○	○	○	○	○	○	○
j. Generally, I interact with members of this professional group socially (outside of work hours).	○	○	○	○	○	○	○
k. Generally, I choose to share my work breaks with members of this occupational group.	○	○	○	○	○	○	○

Power Relationships

The statements on this page will ask you about your perception of thepower held by occupational therapists. Please indicate your level of agreement with each statement.

Please rate the extent to which you agree or disagree with each statement in relation to the occupational therapy profession.

10. Power relationships and occupational therapy

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment (money, goods, services, etc.)	○	○	○	○	○	○	○
b. Generally this occupational group has the ability to apply coercive force when making decisions.	○	○	○	○	○	○	○
c. In this organisation, employees of this occupational group can influence decisions about material resources.	○	○	○	○	○	○	○
d. Generally, this occupational group uses its social influence (on reputation, prestige, etc., through media, etc.) to obtain its will.	○	○	○	○	○	○	○
e. This occupational group has input when making decisions about material resources.	○	○	○	○	○	○	○
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
g. When making decisions about material resources employees of this occupational group actively influence their superiors.	○	○	○	○	○	○	○
h. Generally this occupational group uses access to formal processes to obtain its will (legal, professional association, etc.)	○	○	○	○	○	○	○
I. Generally, I interact with members of this occupational group on a professional level only.	○	○	○	○	○	○	○
j. Generally, I interact with members of this professional group socially (outside of work hours).	○	○	○	○	○	○	○
k. Generally, I choose to share my work breaks with members of this occupational group.	○	○	○	○	○	○	○

Power Relationships

The statements on this page will ask you about your perception of thepower held by psychiatrists. Please indicate your level of agreement with each statement.

Please rate the extent to which you agree or disagree with each statement in relation to the psychiatry profession.

11. Power relationships and psychiatry

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment (money, goods, services, etc.)	○	○	○	○	○	○	○
b. Generally this occupational group has the ability to apply coercive force when making decisions.	○	○	○	○	○	○	○
c. In this organisation, employees of this occupational group can influence decisions about material resources.	○	○	○	○	○	○	○
d. Generally, this occupational group uses its social influence (on reputation, prestige, etc., through media, etc.) to obtain its will.	○	○	○	○	○	○	○
e. This occupational group has input when making decisions about material resources.	○	○	○	○	○	○	○
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
g. When making decisions about material resources employees of this occupational group actively influence their superiors.	○	○	○	○	○	○	○
h. Generally this occupational group uses access to formal processes to obtain its will (legal, professional association, etc.)	○	○	○	○	○	○	○
I. Generally, I interact with members of this occupational group on a professional level only.	○	○	○	○	○	○	○
j. Generally, I interact with members of this professional group socially (outside of work hours).	○	○	○	○	○	○	○
k. Generally, I choose to share my work breaks with members of this occupational group.	○	○	○	○	○	○	○

Power Relationships

The statements on this page will ask you about your perception of thepower held by psychologists. Please indicate your level of agreement with each statement.

Please rate the extent to which you agree or disagree with each statement in relation to the psychology profession.

12. Power relationships and psychology

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment (money, goods, services, etc.)	○	○	○	○	○	○	○
b. Generally this occupational group has the ability to apply coercive force when making decisions.	○	○	○	○	○	○	○
c. In this organisation, employees of this occupational group can influence decisions about material resources.	○	○	○	○	○	○	○
d. Generally, this occupational group uses its social influence (on reputation, prestige, etc., through media, etc.) to obtain its will.	○	○	○	○	○	○	○
e. This occupational group has input when making decisions about material resources.	○	○	○	○	○	○	○
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
g. When making decisions about material resources employees of this occupational group actively influence their superiors.	○	○	○	○	○	○	○
h. Generally this occupational group uses access to formal processes to obtain its will (legal, professional association, etc.)	○	○	○	○	○	○	○
I. Generally, I interact with members of this occupational group on a professional level only.	○	○	○	○	○	○	○
j. Generally, I interact with members of this professional group socially (outside of work hours).	○	○	○	○	○	○	○
k. Generally, I choose to share my work breaks with members of this occupational group.	○	○	○	○	○	○	○

Power Relationships

The statements on this page will ask you about your perception of thepower held by social workers. Please indicate your level of agreement with each statement.

Please rate the extent to which you agree or disagree with each statement in relation to the social work profession.

13. Power relationships and social work

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment (money, goods, services, etc.)	○	○	○	○	○	○	○
b. Generally this occupational group has the ability to apply coercive force when making decisions.	○	○	○	○	○	○	○
c. In this organisation, employees of this occupational group can influence decisions about material resources.	○	○	○	○	○	○	○
d. Generally, this occupational group uses its social influence (on reputation, prestige, etc., through media, etc.) to obtain its will.	○	○	○	○	○	○	○
e. This occupational group has input when making decisions about material resources.	○	○	○	○	○	○	○
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
g. When making decisions about material resources employees of this occupational group actively influence their superiors.	○	○	○	○	○	○	○
h. Generally this occupational group uses access to formal processes to obtain its will (legal, professional association, etc.)	○	○	○	○	○	○	○
l. Generally, I interact with members of this occupational group on a professional level only.	○	○	○	○	○	○	○
j. Generally, I interact with members of this professional group socially (outside of work hours).	○	○	○	○	○	○	○
k. Generally, I choose to share my work breaks with members of this occupational group.	○	○	○	○	○	○	○

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

14. Clinical Activites

	Yes	No
a. Patient Medical Assessment Review	○	○
b. Review of Medical/Blood Results	○	○
c. Pathology Requests	○	○
d. Medication Review	○	○
e. ccCHIP Referral Form Completion	○	○
f. Psychiatry Review in Client Home with Registrar	○	○
g. Medication Prescribing	○	○
h. Legal Activity (MHA) Schedules	○	○
i. One-to-One Nursing Care	○	○
j. Administer PRN medication	○	○
k. Nurses Meeting	○	○
l. Clozapine Clinic	○	○
m. Nursing Ward Rounds	○	○
n. Supervise Client Bathing	○	○
o. Assist Client Washing Clothes	○	○
p. Give Medication Oral and IMI	○	○
q. Supervise Meal Times	○	○
r. Living Skills Assessment	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

15. Clinical Activities

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Patient Medical Assessment Review	☐	☐	☐	☐	☐	☐
b. Review of Medical/Blood Results	☐	☐	☐	☐	☐	☐
c. Pathology Requests	☐	☐	☐	☐	☐	☐
d. Medication Review	☐	☐	☐	☐	☐	☐
e. ccCHIP Referral Form Completion	☐	☐	☐	☐	☐	☐
f. Psychiatry Review in Client Home with Registrar	☐	☐	☐	☐	☐	☐
g. Medication Prescribing	☐	☐	☐	☐	☐	☐
h. Legal Activity (MHA) Schedules	☐	☐	☐	☐	☐	☐
i. One-to-One Nursing Care	☐	☐	☐	☐	☐	☐
j. Administer PRN medication	☐	☐	☐	☐	☐	☐
k. Nurses Meeting	☐	☐	☐	☐	☐	☐
l. Clozapine Clinic	☐	☐	☐	☐	☐	☐
m. Nursing Ward Rounds	☐	☐	☐	☐	☐	☐
n. Supervise Client Bathing	☐	☐	☐	☐	☐	☐
o. Assist Client Washing Clothes	☐	☐	☐	☐	☐	☐
p. Give Medication Oral and IMI	☐	☐	☐	☐	☐	☐
q. Supervise Meal Times	☐	☐	☐	☐	☐	☐
r. Living Skills Assessment	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

16. Both Clinical Activities and Non-Clinical Generic Activities

	Yes	No
a. Mandatory Training	○	○
b. Professional Development	○	○
c. Journal Club	○	○
d. Teaching	○	○
e. Research	○	○
f. Learning & Development	○	○
g. Outing with Consumers	○	○
h. Review of Patient Files	○	○
i. Powerchart Entries	○	○
j. Correspondence with Senior Clinician and Others	○	○
k. Support Distressed Clients	○	○
l. (GP) Collaborative Projects Meeting	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

17. Both Clinical Activities and Non-Clinical Generic Activities

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Mandatory Training	☐	☐	☐	☐	☐	☐
b. Professional Development	☐	☐	☐	☐	☐	☐
c. Journal Club	☐	☐	☐	☐	☐	☐
d. Teaching	☐	☐	☐	☐	☐	☐
e. Research	☐	☐	☐	☐	☐	☐
f. Learning & Development	☐	☐	☐	☐	☐	☐
g. Outing with Consumers	☐	☐	☐	☐	☐	☐
h. Review of Patient Files	☐	☐	☐	☐	☐	☐
i. Powerchart Entries	☐	☐	☐	☐	☐	☐
j. Correspondence with Senior Clinician and Others	☐	☐	☐	☐	☐	☐
k. Support Distressed Clients	☐	☐	☐	☐	☐	☐
l. (GP) Collaborative Projects Meeting	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

18. Non-Clinical Generic Activities

	Yes	No
a. Management	○	○
b. Staff Performance Management	○	○
c. Administrative Tasks	○	○
d. Emails and Correspondence	○	○
e.CERNER	○	○
f. Orientation New Staff	○	○
g. Provide Operational Supervision	○	○
h. Receive Operational Supervision	○	○
I. Follow-up Client	○	○
j. Meeting-Operational Matters	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

19. Non-Clinical Generic Activities

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Management	☐	☐	☐	☐	☐	☐
b. Staff Performance Management	☐	☐	☐	☐	☐	☐
c. Administrative Tasks	☐	☐	☐	☐	☐	☐
d. Emails and Correspondence	☐	☐	☐	☐	☐	☐
e.CERNER	☐	☐	☐	☐	☐	☐
f. Orientation New Staff	☐	☐	☐	☐	☐	☐
g. Provide Operational Supervision	☐	☐	☐	☐	☐	☐
h. Receive Operational Supervision	☐	☐	☐	☐	☐	☐
I. Follow-up Client	☐	☐	☐	☐	☐	☐
j. Meeting-Operational Matters	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

20. Clinical Process - Assessment & Formulation

	Yes	No
a. Mental Health Assessment	○	○
b. Referrals	○	○
c. Complete MHOAT Modules K10, HoNOS, etc	○	○
d. Report Writing	○	○
e. Mental State Examination (MSE)	○	○
f. Risk Assessment	○	○
g. Home Visits	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

21. Clinical Process - Assessment & Formulation

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Mental Health Assessment	☐	☐	☐	☐	☐	☐
b. Referrals	☐	☐	☐	☐	☐	☐
c. Complete MHOAT Modules K10, HoNOS, etc	☐	☐	☐	☐	☐	☐
d. Report Writing	☐	☐	☐	☐	☐	☐
e. Mental State Examination (MSE)	☐	☐	☐	☐	☐	☐
f. Risk Assessment	☐	☐	☐	☐	☐	☐
g. Home Visits	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

22. Clinical Process - Therapy

	Yes	No
a.Counselling	○	○
b. Client Intervention	○	○
c. Hospital Inreach	○	○
d. Visit Burwood Respite	○	○
e. Ward Visit	○	○
f. Interpreter Assessment	○	○
g. Phone Counselling	○	○
h. Clinical Care/Review	○	○
I. Care Review Meeting	○	○
j. Feedback	○	○
k. Medication Supervision	○	○
l. Individual Therapy	○	○
m. Create Food Diary Template	○	○
n. Encourage Client to Engage in Social Activity	○	○
o. Psychological Therapy	○	○
p. Psychoeducation	○	○
q. DBT Group	○	○
r. Groups	○	○
s. DBT Consultation	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

23. Clinical Process - Therapy

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a.Counselling	☐	☐	☐	☐	☐	☐
b. Client Intervention	☐	☐	☐	☐	☐	☐
c. Hospital Inreach	☐	☐	☐	☐	☐	☐
d. Visit Burwood Respite	☐	☐	☐	☐	☐	☐
e. Ward Visit	☐	☐	☐	☐	☐	☐
f. Interpreter Assessment	☐	☐	☐	☐	☐	☐
g. Phone Counselling	☐	☐	☐	☐	☐	☐
h. Clinical Care/Review	☐	☐	☐	☐	☐	☐
I. Care Review Meeting	☐	☐	☐	☐	☐	☐
j. Feedback	☐	☐	☐	☐	☐	☐
k. Medication Supervision	☐	☐	☐	☐	☐	☐
l. Individual Therapy	☐	☐	☐	☐	☐	☐
m. Create Food Diary Template	☐	☐	☐	☐	☐	☐
n. Encourage Client to Engage in Social Activity	☐	☐	☐	☐	☐	☐
o. Psychological Therapy	☐	☐	☐	☐	☐	☐
p. Psychoeducation	☐	☐	☐	☐	☐	☐
q. DBT Group	☐	☐	☐	☐	☐	☐
r. Groups	☐	☐	☐	☐	☐	☐
s. DBT Consultation	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

24. Clinical Process - Continuity of Care

	Yes	No
a. Case Consultation	○	○
b. Client Discharge	○	○
c. Student Clinical Placement	○	○
d. Receive Clinical Supervision	○	○
e. Provide Clinical Supervision	○	○
f. Handover Meeting	○	○
g. MDT Input over Consumer Care	○	○
h. Clinical Notes/Documentation	○	○
I. Liaise with Pharmacy	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

25. Clinical Process - Continuity of Care

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Case Consultation	☐	☐	☐	☐	☐	☐
b. Client Discharge	☐	☐	☐	☐	☐	☐
c. Student Clinical Placement	☐	☐	☐	☐	☐	☐
d. Receive Clinical Supervision	☐	☐	☐	☐	☐	☐
e. Provide Clinical Supervision	☐	☐	☐	☐	☐	☐
f. Handover Meeting	☐	☐	☐	☐	☐	☐
g. MDT Input over Consumer Care	☐	☐	☐	☐	☐	☐
h. Clinical Notes/Documentation	☐	☐	☐	☐	☐	☐
I. Liaise with Pharmacy	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

26. Activities Related to External Providers

	Yes	No
a. Care Co-Ordination (e.g. deliver Webster pack)	○	○
b. Liaison with Service Providers	○	○
c. Financial Management Order Hearing	○	○
d. Applications JD, DoH, DSP	○	○
e.Assist Client with Legal Aid	○	○
f. Consumer Escort/Transport	○	○
g. Follow-Up Housing/Other Forms	○	○
h. Writing Support Letters	○	○
I. CTO Hearing	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

27. Activities Related to External Providers

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Care Co-Ordination (e.g. deliver Webster pack)	☐	☐	☐	☐	☐	☐
b. Liaison with Service Providers	☐	☐	☐	☐	☐	☐
c. Financial Management Order Hearing	☐	☐	☐	☐	☐	☐
d. Applications JD, DoH, DSP	☐	☐	☐	☐	☐	☐
e.Assist Client with Legal Aid	☐	☐	☐	☐	☐	☐
f. Consumer Escort/Transport	☐	☐	☐	☐	☐	☐
g. Follow-Up Housing/Other Forms	☐	☐	☐	☐	☐	☐
h. Writing Support Letters	☐	☐	☐	☐	☐	☐
I. CTO Hearing	☐	☐	☐	☐	☐	☐

Mental Health Activities

1. Consider the following activities that are performed by staff in the Mental Health Service and please indicate which of these activities you perform by placing a tick in either of the columns marked "Yes" or "No".

28. Community and Support Activities

	Yes	No
a. Search for Consumer in Community	○	○
b. Complete CTO	○	○
c. Serve CTO	○	○
d. Breach CTO	○	○
e. Provide Carer Support	○	○
f. Family Meeting	○	○
g. Attend GP Appointment with Consumer	○	○
h. Organise Consumer Belongings	○	○
I. Assist Consumer Clean Room/Unit/Accommodation	○	○
j. Create Repayment Schedule for Consumer	○	○
k. Assist Consumer with Shopping	○	○

Mental Health Activities

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

2. Consider the activities listed below and please indicate which professional group primarily performs these activities. You may select more than one option. If you consider that an activity can be performed by all disciplines, then tick "Generic."

29. Community and Support Activities

	Nursing	Occupational Therapy	Psychiatry	Psychology	Social Work	Generic
a. Search for Consumer in Community	☐	☐	☐	☐	☐	☐
b. Complete CTO	☐	☐	☐	☐	☐	☐
c. Serve CTO	☐	☐	☐	☐	☐	☐
d. Breach CTO	☐	☐	☐	☐	☐	☐
e. Provide Carer Support	☐	☐	☐	☐	☐	☐
f. Family Meeting	☐	☐	☐	☐	☐	☐
g. Attend GP Appointment with Consumer	☐	☐	☐	☐	☐	☐
h. Organise Consumer Belongings	☐	☐	☐	☐	☐	☐
I. Assist Consumer Clean Room/Unit/Accommodation	☐	☐	☐	☐	☐	☐
j. Create Repayment Schedule for Consumer	☐	☐	☐	☐	☐	☐
k. Assist Consumer with Shopping	☐	☐	☐	☐	☐	☐

Discipline Specific Versus Generic Activities

We are interested in understanding how much time you spend on discipline specific activities and how much time you spend on generic activities.

Discipline specific activities are those activities that can only be performed by members of one professional group.

Generic activities are those activities that can be performed by multiple professional groups.

30. How much of your time weekly would you estimate that you spend as a percentage (out of 100) performing discipline specific activities?

31. How much of your time weekly would you estimate that you spend as a percentage (out of 100) performing generic activities?

32. What other activities do you perform that have not been included on this list? Please list as many as you think are relevant.

Semi-structured Interviews

We are also interested in conducting interviews with staff from the mental health service. We are interested in finding out about their experiences working in mental health and working with other professional groups.

33. Do you agree to being interviewed?

- ◯ Yes
- ◯ No

34. If you agree to being interviewed please provide your contact details below.

Name	
Email Address	
Phone Number	

Thank You

We wish to thank you for taking the time to fill out the questionnaires.
If you have any questions, you can contact Lil Vrklevski on 0421011991.

Appendix 7 Information for Participants Pilot Study 2

Mental Health Services

INFORMATION FOR PARTICIPANTS

STUDY TITLE: What is the role of allied health in the future of public mental health services?

INVESTIGATOR: The research is being conducted by Lil Vrklevski, Director Psychology SLHD: Telephone Number 97678757 for the degree of Doctor of Philosophy under the supervision of Associate Professor Jeff Patrick and Dr Kathy Eljiz, School of Business, University of Tasmania.

INTRODUCTION:

You are invited to take part in a research study examining the role of allied health in the future of the public mental health service. This Participant Information Sheet will tell you about what is involved in the study and help you decide whether or not you wish to take part. Please read this information carefully. If there is anything you do not understand or if you feel you need more information about anything, please ask.

WHY HAVE I BEEN ASKED TO TAKE PART?

You have been invited to take part in this research because you are a staff member belonging to one of the five (5) professional groups most commonly represented in public mental health services.

WHAT IS THE PURPOSE OF THIS RESEARCH?

The purpose of the research is to create a Mental Health Activities Checklist (MHAC), which will be used in the Main Study. You will be asked to keep a logbook for two (2) weeks recording all activities you perform daily in providing care to consumers of the mental health service.

DO I HAVE TO TAKE PART IN THE STUDY?

Taking part in any research is entirely voluntary. If you do decide to take part, you can withdraw at any time without having to give a reason. Please be assured that, whatever your decision, it will not affect your relationship with the principal investigator or your relationship with the SLHD mental health service.

WHAT DO I HAVE TO DO?

You will need to keep a logbook for two (2) weeks and record what activities you performed daily in providing care for consumers of the mental health service. At the end of the two (2) weeks the logbooks will be collected by the principal investigator and analysed. All the activities listed will be used to create the Mental Health Activities Checklist, which will be used in the Main Research Study. It is anticipated that daily recording may take about 15 to 30 minutes.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

While taking part in the study may not be of direct benefit to you the research study may further our knowledge about the provision of care to consumers of the mental health service.

WHAT ARE THE RISKS OF TAKING PART?

There are no identified risks of taking part other than a slightly increased workload over a two week period.

CONFIDENTIALITY

By signing the consent form you are agreeing to participate in this study. All details obtained by the principal investigator will remain confidential. A report of this study may be submitted for publication but individual participants will not be identifiable.

FURTHER INFORMATION

When you have read this information, Lil Vrklevski will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Lil Vrklevski on (02) 97678757 or lil.vrklevski@sswahs.nsw.gov.au. This information sheet is for you to keep.

This study has been approved by the Human Research Ethics Committee - CRGH of the Sydney Local Health District LNR/15/CRGH/144; LNRSSA/15/CRGH/145; LNRSSA/15/RPAH/374 If you have any concerns or complaints about the conduct of the research study, you may contact the Executive Officer of the Ethics Committee, on (02) 9767 5622.

This study has been approved by the Tasmanian Health and Medical Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote [insert HREC project number].

The conduct of this study at the Professor Marie Bashir Centre at RPAH and the Camperdown, Canterbury, Croydon, Marrickville and Redfern Community Health Centres has been authorised by the SLHD (RPAH Zone). Any person with concerns or complaints about the conduct of this study may contact the Research Governance Officer on (02) 9515 57899 and quote protocol number; X15-0273.

What is the role of allied health in the future of public mental health services?

PARTICIPANT CONSENT FORM

I, ……..……..……[name]

of……[address]

have read and understood the Information for Participants for the above named research study and have discussed the study with ……
……...

- I have been made aware of the procedures involved in the study, including any known or expected inconvenience or risk, and of their implications as far as they are currently known by the researchers.

- I freely choose to participate in this study and understand that I can withdraw at any time.

- I also understand that the research study is strictly confidential.

- I hereby agree to participate in this research study.

Name (Please Print): ..... .

Signature:..... **Date:** .....

Name of Person who conducted informed consent discussion (Please Print):

……

Signature of Person who conducted informed consent discussion:

Signature:..... **Date:** .....

Appendix 8 Pilot Study 2 Instructions

STUDY TITLE: What is the role of allied health in the future of public mental health services? (**HREC:** LNR/15/CRGH/144)

We have included a detailed confidential information statement as a separate sheet in this logbook. The following is a summary of the main parts of the statement and a more detailed description of what you are expected to do in filling out this logbook.

Purpose: The purpose of the research is to create a Mental Health Activities Checklist (MHAC), which will be used in the Main Study. You will be asked to keep a logbook for two (2) weeks recording all activities you perform daily in providing care to consumers of the mental health service.

Activity Instructions and Length: You will need to keep a logbook for two (2) weeks and record what activities you performed daily in providing care for consumers of the mental health service. Please start a new page for each day of recorded activity for the two-week period. You should have a total of ten (10) entries by the end of the two week period. There are two columns on each page. On the left hand column, please provide the name of the activity that you have undertaken as part of your role. In the right hand column corresponding to the activity, please provide a brief description of what that activity entailed. You will only need to provide the description once for the same activity regardless of how many times you conduct the activity over the two-week log period. You will still need to record the activity though each time you perform it.

At the end of the two (2) weeks, the logbooks will be collected by the principal investigator and analysed. All the activities listed will be used to create the Mental Health Activities Checklist, which will be used in the Main Research Study. It is anticipated that daily recording may take about 15 to 30 minutes.

Confidentiality: You are being asked to provide your name and position for grouping purposes only. We need to identify which professional group you belong to and whether you work primarily in inpatient or community services. We would like to be able to contact you to verify any information we might not understand. This logbook will be destroyed once we have transcribed the text and we will not use your name or position in any studies or on any of the transcripts. The transcripts will be coded.

Name: _____

Position: _____

Where is your <u>primary</u> focus of work? (please circle relevant focus)

Inpatient mental health team

Community mental health team

Appendix 9 Pilot Study 2

Rationale and Aim

The objective of the second pilot study was to develop the Mental Health Activities Checklist (MHAC). A review of the literature did not provide an activities list that was either suitable or could be adapted for use in this study (Webber & Nathan 2010). A preliminary study was conducted to develop the MHAC. This study generated a list of activities performed by nurses, occupational therapists, psychiatrists, psychologists and social workers in the provision of care to consumers of the SLHD mental health service.

Participant Selection

The researcher used purposive sampling to identify and select two members from each of the five professional groups in the SLHD mental health service. Each of the five professional groups consisted of one member employed on an inpatient unit and the other member employed on a community team. The researcher contacted 10 staff members by telephone or email and invited them to participate in the study. Five staff members worked in inpatient units and five staff members worked on community mental health teams. This sampling method was used to ensure that the full range of activities performed by each of the professional groups would be elicited.

Each participant was told that the researcher was enrolled in a PhD at The University of Tasmania. They were told the research topic was examining the role of allied health in the future of the public mental health service. Participants were asked to keep a logbook for a two-week period. They were instructed to make daily entries recording the activities they performed in the course of providing care to consumers of the mental health service (see Appendix 10). They were also provided with the Information for Participants and Consent Forms (see Appendix 8).

Procedure

All ten staff members that were approached by the researcher readily agreed to participate in the study and signed the consent forms. The researcher kept the original signed consent forms and gave each participant a copy. Participants chosen for the study had a reputation in the mental health service for thorough and diligent record keeping. This was important to ensure that the MHAC would be expansive. Information about the qualities and skills of various staff is readily available through the exchange of information that exists in the mental health service through informal networks. The researcher chose clinicians who were known to be reliable record keepers to maximise the accuracy, quantity, and quality of information that was recorded.

Ten exercise books were purchased and prepared as logbooks. Each participant was issued with a logbook. In each logbook, ten consecutive double pages were divided into two columns. The first column was for recording the activity and the second column for providing a brief description of the activity. The date appeared at the top of each double page (see Appendix 10). Some participants elected to use an electronic version of the logbooks. The

reasons given for choosing this method of recording activities were, it was easier, more efficient and involved typing. The front sheet of each logbook included the study title, ethics approval number and instructions for completing the logbooks. Participants were asked to provide their names and professional group. They were asked where they worked, on inpatient units or community teams. For the purpose of the study, no other personal information was required.

Written Instructions Given to Participants:

The following written instructions were given: We have included a detailed confidential information statement as a separate sheet in this logbook. The following is a summary of the main parts of the statement and a more detailed description of what you are expected to do in filling out this logbook.

Purpose:

The purpose of the research is to create a MHAC, which will be used in the Main Study. You will be asked to keep a logbook for two weeks recording all activities you perform daily in providing care to consumers of the mental health service.

Activity Instructions and Length:

You will need to keep a logbook for two weeks and record what activities you performed daily in providing care for consumers of the mental health service. Please start a new page for each day of recorded activity for the two-week period. You should have a total of ten entries by the end of the two-week period. There are two columns on each page. On the left hand column, please provide the name of the activity that you have undertaken as part of your role. In the right hand column corresponding to the activity, please provide a brief description of what that activity entailed. You will only need to provide the description once for the same activity regardless of how many times you conduct the activity over the week log period. You will still need to record the activity though each time you perform it.

At the end of the two weeks, the logbooks will be collected by the principal investigator and analysed. All the activities listed will be used to create the MHAC, which will be used in the Main Research Study. It is anticipated that daily recording may take about 15-30 minutes.

In terms of confidentiality, participants were asked to provide information for grouping purposes only. The information required of each participant was their name, the professional group they belonged to and whether they worked primarily in inpatient or community services. Participants were instructed that the researcher would like to be able to contact them to verify any information that needed to be clarified. Participants were also informed that the logbooks would be destroyed once the text had been transcribed and that the information obtained would be completely deidentifed. At the end of two weeks, the completed logbooks (six hard copy and four electronic copies) were collected by the researcher. They were transcribed and coded to generate a 95-item MHAC (Appendix 11). The logbooks also provided preliminary data on the type of activities performed by mental health staff both discipline specific and generic.

Constructing the Mental Health Activities Checklist (MHAC)

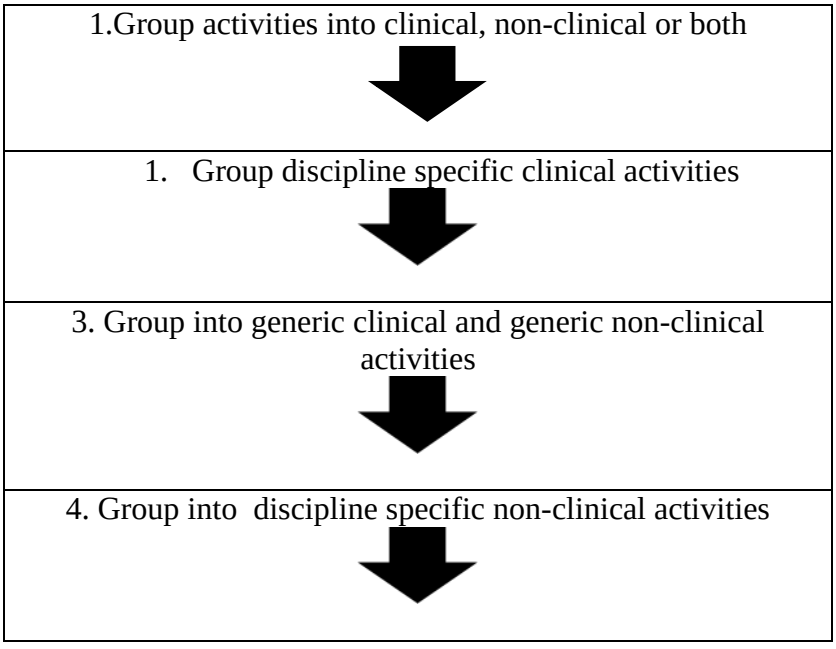
Developing the MHAC was a challenging and complex undertaking. The initial approach considered by the researcher was to extract two-week snapshot data from the CERNER system. CERNER or Powerchart is an electronic file recording system that records the daily activities logged by clinicians. However, these systems only log direct clinical activity and do not provide a mechanism for recording student activity, clinical supervision, mandatory training, discipline specific professional development and other activities performed by clinicians. Therefore, this approach did not provide the complete range of activities or level of information being sought by the researcher.

The researcher also considered using an ethnographic approach to data collection. This would entail directly observing clinicians on a daily basis and recording the activities they performed. There were a number of concerns with this approach. First, it was time-consuming. Second, it was impractical and third it was intrusive. The researcher was also concerned about the impact of this method on confidentiality and disruptions to consumer care. The ethnographic approach was rejected for these reasons but mostly because of its potential to compromise consumer care.

The method of data collection selected was a logbook. The ten participants were instructed to log all the activities they performed daily in providing care to consumers of the mental health service. They kept the logbooks over a two-week period. The logbooks were then transcribed and grouped.

Thematic Analysis/Grouping Procedure

This section describes the procedure for grouping the logbooks and extracting themes.



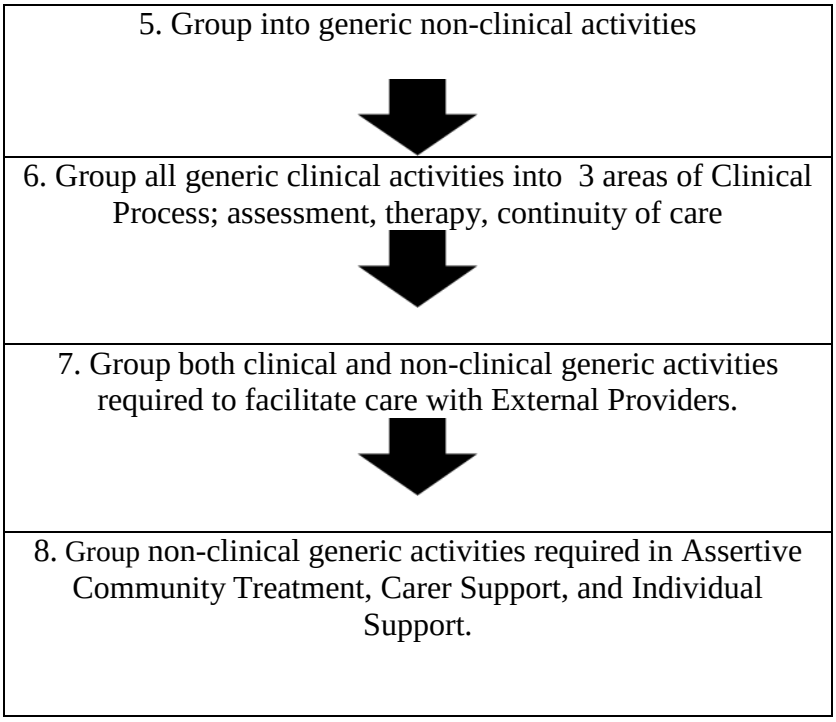


Figure 1: The MHAC - procedure for extracting themes

The first step in the analysis was to group all the activities recorded into three categories, Clinical, Non-Clinical or Both. The second step was to identify the activities that are discipline specific. Discipline specific activities were defined as those activities that can only be performed by members of one professional group. This step identified nine nursing specific activities; eight psychiatry specific activities and one occupational therapy specific activity. No discipline specific activities were identified for psychology and social work.

The nursing specific activities included; ono-to-one nursing care, administering PRN medication, attending nurses meetings, running the clozapine clinic, performing nurse ward rounds, supervising consumers bathing, assisting consumers with laundering their clothes, administering oral and intra muscular medication (IMI) and supervising meal times.

Psychiatry specific activities included; medical assessments and reviews of consumers, reviews of medical and blood results, pathology requests, medication reviews, making referrals to various clinics and other medical professionals, psychiatry review of consumers at home with registrar in attendance, prescribing medication and legal activity such as scheduling consumers.

The one occupational therapy specific activity identified was living skills assessments. It was very interesting to note that in such a preliminary analysis it was obvious that the activities performed by the allied health professional groups were not as clearly differentiated as the activities performed by nurses and psychiatrists.

The third step involved identifying both clinical and non-clinical generic activities that are performed by all disciplines. Generic activities are defined as those activities that can be

performed by multiple professional groups. The activities identified were; mandatory training, professional development, journal club, teaching, research, learning and development, consumer outings, reviewing files, Powerchart or eMR (electronic medical record) entries, correspondence with other clinicians, supporting distressed consumers and GP collaborative meetings.

The fourth step involved identifying any of the Non-Clinical activities that are discipline-specific. None were identified. The fifth step involved identifying the Non-Clinical activities that are generic and performed by all disciplines. The activities identified were; management, managing staff performance, administration, attending to emails and correspondence, CERNER or eMR entries, orientation of new staff, provision of operational supervision, receiving operational supervision, consumer follow-up and meetings to discuss operational matters. The sixth step involved identifying the Clinical Process for all generic clinical activities in three areas:

(a) Assessment and Formulation involved; mental health assessments, dealing with referrals, completing mental health modules (MHOAT) such as K10 or HoNOS, report writing, conducting mental state assessments (MSE), conducting risk assessments and performing home visits.

(b) Therapy – Individual, Group, or Both involved; counselling, consumer interventions, hospital inreach, visiting Burwood Respite, ward visits, interpreter assessments, phone counselling, participating in clinical and care reviews, and attending care review meetings. It included providing feedback to consumers and families, supervising medication, providing individual therapy and assisting consumers with diaries or other monitoring charts, facilitating dialectical behaviour therapy groups (DBT), facilitating other psychological groups, DBT consultation, encouraging consumers to engage in social activities, providing psychological therapies and psychoeducation.

(c) Continuity of Care involved case consultation, facilitating consumer discharge, providing student clinical placements, receiving clinical supervision, providing clinical supervision, attending handover meetings, attending MDT meetings and providing input regarding consumer care, clinical documentation and pharmacy liaison.

The seventh step involved identifying both clinical and non-clinical generic activities required to facilitate care with External Providers. These activities could be performed by all professional groups. The activities identified were care co-coordination (such as delivery of Webster packs to consumers), liaison with service providers, preparation for financial management order hearings and preparing applications required by various government and non-government agencies such as Social Housing, Centrelink, Guardianship Tribunal, Mental Health Review Tribunal and Local and District courts. The activities also included assisting consumers with Legal Aid applications, consumer escorts and transport, follow-up with various government and non-government agencies, writing support letters for consumers, preparing, and attending CTO hearings.

The final step was identifying the non-clinical generic activities required in Assertive Community Treatment, Carer Support, and Individual Support. The activities identified in assertive community treatment included; searching for consumers in the community after a breach of a community treatment order (CTO), serving a CTO, completing a CTO and activating a breach of a CTO. The activities required for carer support were family meetings and providing support to carers.

Activities required to facilitate individual support were assisting consumers with GP appointments by providing transport, reminders and accompanying them, organising consumer belongings (which included purchasing items, help with budgeting, and delivery of and storage of items during hospitalisations or evictions). They included assisting consumers in cleaning their rooms or units, creating repayment schedules for consumers who have difficulties in managing their finances independently and assisting consumers with shopping (which included transport, delivery of items, preparing shopping lists and menus and menus and budgeting). After completing this eight-step process, the 95 activities were grouped into eight themes. They are shown in Table 1.

Table 1: MHAC themes

1.Clinical Activities
2. Both Clinical And Non-Clinical Generic Activities
3. Non-Clinical Generic Activities
4. Internal Clinical Process Activities - Assessment And Formulation
5. Clinical Process Activities - Therapy
6. Clinical Process Activities - Continuity Of Care
7. Activities Related To External Providers
8. Non-Clinical Continuity and Support Activities.

The analysis was informative but certainly not exhaustive. There were some activities that the researcher was able to identify based on experience as being performed by members of her professional group, and colleagues from other disciplines that were absent from the list. In summary, the MHAC was developed to answer the following research questions:

1.1 What activities are performed by the five professional groups in the mental health service?

1.2 How much time is spent by each professional group on each of these activities?

2.1 Do the activities performed by each of the five professional groups require generic or specific skills?

In developing the MHAC, the researcher considered asking participants to assign a numerical value (i.e. number of minutes) to each activity but considering that there are 95 activities in the MHAC this option was rejected. Instead, participants were firstly asked to indicate whether they performed each of the 95 activities listed by placing a tick in the yes or no columns. Secondly, participants were asked to indicate whether each activity they performed was primarily discipline specific or generic by placing a tick in the appropriate column. In order to answer question 1.2 participants were given a single question and asked to estimate the time they spent as a percentage performing discipline specific activities and generic activities. Last, participants were also asked to list any activities they performed that had not been included in the MHAC. This generated an interesting list that has been included in the results section.

Appendix 10 MHAC Logbook - Sample Page

DATE: 15/9/15

ACTIVITY	DESCRIPTION OF ACTIVITY
handover	daily handover of high acuity patients
case review	weekly case review of high and medium acuity patients and discussion of progress of selected patients presented by case managers (treatment and management discussed with doctors/team)
script writing	script for outpatient
correspondence with a registrar	corresponded regarding treatment of an inpatient
correspondence with a psychiatrist	correspondence regarding treatment of an outpatient
patient assessment X2	assessment of mental state, treatment, documentation in medical file
correspondence with a case manager	corresponded with a case manager about an appointment.

Appendix 11 Preliminary Analysis MHAC

A list of all activities generated from the logbooks. Where there was evidence of duplication or use of terms that referred to the same activity, these were combined to reduce the list to 95 activities.

1. Handover meeting
2. Clinical care/review
3. Meeting regarding operational matters
4. Mental State Assessment
5. Care Co-ordination
6. Legal activity MHA
7. Administrative tasks
8. Case notes/clinical documentation
9. Care Review Meeting
10. Psychological therapy
11. GP collaborative project meeting
12. Consumer discharge
13. Orientation new staff
14. CERNER Update training
15. DBT group
16. DBT consultation
17. Clinical supervision provide
18. Clinical supervision receive
19. Management
20. Operational supervision provide
21. Operational supervision receive
22. Hospital inreach
23. Mental Health Assessment
24. Breach of CTO
25. GP appointment with consumer
26. Carer support
27. Staff performance management
28. DBT consultation meeting
29. Forensic risk assessment
30. Financial management order hearing
31. Review of patient files
32. Correspondence with senior clinician
33. Correspondence with MDT/colleague re input for consumer care
34. Medication –prescribing
35. Patient medical assessment/review
36. Pathology requests
37. Family meeting

38. Professional development
39. Review of medical/blood results
40. Teaching
41. Student clinical placement
42. Clozapine clinic
43. Medication review
44. Research
45. Learning & development
46. Liaison with service providers
47. Consumer Intervention
48. Writing support letter
49. Emails and correspondence
50. Organise consumer belongings
51. Applications JD, DoH, DSP,
52. Interpreter assessment
53. Groups
54. Dealing with referrals
55. Consumer escort
56. Living skills assessment
57. Report writing
58. Outing with consumers
59. Individual therapy
60. Case consultation
61. Journal club
62. Phone counselling
63. Feedback
64. Case consultation
65. Psychoeducation
66. Create food diary template
67. Home Visits
68. Deliver Webster pack
69. Medication supervision
70. Ward Visit
71. ccCHIP referral form completion
72. Search for consumer in community
73. Create repayment schedule for consumer
74. Liaise with pharmacy
75. Complete CTO
76. Serve CTO
77. Compete K10/HoNOS/MHOAT
78. Discharge consumer
79. CTO hearing
80. Powerchart entry
81. Visit Burwood Respite

82. Mandatory training
83. Follow-up Housing forms
84. Psychiatry review in consumer's home with registrar
85. Consumer transport
86. Follow-up consumer FTA
87. Supervise consumer medication
88. Nursing ward rounds
89. Supervise consumer bathing
90. Assist consumer-washing clothes
91. Assist consumer clean room
92. Nurses meeting
93. One-to-one nursing care
94. Give medication oral and IMI
95. Assist consumer with Legal Aid
96. Encourage consumer to engage in social activity
97. Supervise mealtime
98. Assist consumer with shopping
99. Support distressed consumer
100. Administer PRN medication
101. Counselling consumer

Appendix 12 Theme Analysis MHAC

1. CLINICAL ACTIVITIES DISCIPLNE SPECFIC (ONLY DOCTORS)

Patient Medical Assessment Review
Review of Medical/Blood Results
Pathology Requests
Medication Review
ccCHIP Referral Form Completion
Psychiatry Review in Consumer Home with Registrar
Medication Prescribing
Legal Activity (MHA) Schedules

2. CLINICAL ACTIVITIES DISCIPLINE SPECIFIC (ONLY NURSES)

Ono-to-One Nursing Care
Administer PRN medication
Nurses Meeting
Clozapine Clinic
Nursing Ward Rounds
Supervise Consumer Bathing
Assist Consumer Washing Clothes
Give Medication Oral and IMI
Supervise Meal Times

3. CLINICAL ACTIVITIES DISCIPLINE SPECIFIC (ONLY OT)

Living Skills Assessment

4. BOTH CLINICAL & NON-CLINICAL GENERIC ACTIVITIES (ALL DISCIPLINES)

Mandatory Training
Professional Development
Journal Club
Teaching
Research
Learning & Development
Outing with Consumers
Review of Patient Files
Powerchart Entries
Correspondence with Senior Clinician and Others
Support Distressed Consumers
(GP) Collaborative Projects Meeting

5. NON-CLINICAL GENERIC (ALL DISCIPLINES)

Management
Staff Performance Management
Administrative Tasks
Emails & Correspondence
CERNER
Orientation New Staff
Provide Operational Supervision
Receive Operational Supervision
Follow-Up Consumer
Meeting-Operational Matters

6. INTERNAL CLINICAL PROCESS (ALL DISCIPLINES)

6a Assessment & Formulation

Mental Health Assessment
Referrals
Complete MHOAT Modules K10, HoNOS,
Report Writing
Mental State Assessment (MSE)
Risk Assessment
Home Visits

6b Therapy

INDIVIDUAL	BOTH	GROUP
Counselling	Encourage Consumer to Engage in Social Activity	DBT Group
Consumer Intervention	Psychological Therapy	Groups
Hospital Inreach	Psychoeducation	DBT Consultation
Visit Burwood Respite		
Ward Visit		
Interpreter Assessment		
Phone Counselling		
Clinical Care/Review		
Care Review Meeting		
Feedback		
Medication Supervision		
Individual Therapy		
Create Food Diary Template		

6c Continuity of Care

Case Consultation
Consumer Discharge
Student Clinical Placement
Receive Clinical Supervision
Provide Clinical Supervision
Handover Meeting
MDT Input over Consumer Care
Clinical Notes/Documentation
Liaise with Pharmacy

7. BOTH CLINICAL & NON-CLINICAL ACTIVITIES (ALL DISCIPLINES)

External Providers

Care Co-Ordination (e.g. deliver Webster pack)
Liaison with Service Providers
Financial Management Order Hearing
Applications JD, DoH, DSP
Assist Consumer with Legal Aid
Consumer Escort/Transport
Follow-Up Housing/Other Forms
Writing Support Letters
CTO Hearing

8. NON-CLINICAL (ALL DISCIPLINES)

ASSERTIVE COMMUNITY TREATMENT	OTHER CARER SUPPORT	OTHER INDIVIDUAL SUPPORT
Search for Consumer in Community	Carer Support	GP Appointment with Consumer
Serve CTO	Family Meeting	Organise Consumer Belongings
Complete CTO		Assist Consumer Clean Room
Breach CTO		Create Repayment Schedule for Consumer
		Assist Consumer with Shopping

PROCEDURE FOR THEMATIC ANALYSIS/GROUPING

Developing the MHAC was a challenging and complex undertaking. One of the early approaches to this task considered by the researcher was to extract two-week snapshot data from the CERNER system. CERNER or Powerchart are two electronic file recording systems that record the activities logged by clinicians on a daily basis. However, these systems only log direct clinical activity and do not provide a mechanism for recording student activity, clinical supervision, mandatory training, discipline specific professional development and other activities performed by clinicians on a daily basis. Therefore, this did not provide the complete range of activities or level of information being sought by the researcher.

The researcher also considered adopting an ethnographic approach to data collection by directly observing clinicians daily and recording the activities they performed. However, this approach was time-consuming, impractical, and intrusive and interfered with patient care. This approach was rejected for these reasons and in particular, because it was felt that it would compromise patient care.

The method of data collection selected was a logbook in which clinicians were instructed to log their daily activities in providing care to consumers of the mental health service over a two-week period. The logbooks were then transcribed and grouped.

STEPS TAKEN:

1. The first step in the analysis was to decide and group all the activities recorded into three categories; primarily Clinical, Non-Clinical or Both.

2. The second step was to identify those activities that are discipline specific. Discipline specific activities were defined as those activities that can only be performed by members of one professional group.

   This step identified 9 Nursing Specific Activities; 8 Psychiatry Specific Activities and 1 Occupational Therapy Specific Activity. No discipline specific activities were identified for Psychology and Social Work. The nursing specific activities included; ono-to-one nursing care, administering PRN medication, attending nurses meetings, running the clozapine clinic, performing nurse ward rounds, supervising consumers bathing, assisting consumers with laundering their clothes, administering oral and intra muscular medication (IMI) and supervising meal times. Psychiatry specific activities included; medical assessments and reviews of consumers, reviews of medical and blood results, pathology requests, medication reviews, making referrals to various clinics and other medical professionals, psychiatry review of consumers at home with registrar in attendance, prescribing medication and legal activity such as scheduling consumers. The one occupational therapy specific activity identified was living skills assessments. It was very interesting to note that in such a preliminary

analysis it was obvious that the activities performed by the allied health professional groups were not as clearly differentiated as the activities performed by nurses and psychiatrists.

3. The third step involved identifying both clinical and non-clinical generic activities that are performed by all disciplines. Generic activities are defined as those activities that can be performed by multiple professional groups. The activities identified were; mandatory training, professional development, journal club, teaching, research, learning and development, consumer outings, reviewing files, Powerchart or eMR (electronic medical record) entries, correspondence with other clinicians, supporting distressed consumers and GP collaborative meetings.

4. The fourth step involved identifying any of the Non-Clinical Activities that are discipline-specific. None were identified.

5. The fifth step involved identifying the Non-Clinical Activities that are generic and performed by all disciplines. The activities identified were; management, managing staff performance, administration, attending to emails and correspondence, CERNER or eMR entries, orientation of new staff, provision of operational supervision, receiving operational supervision, consumer follow-up, meeting to discuss operational matters.

6. The sixth step involved identifying the Clinical Process for all generic clinical activities into:

(a) Assessment and Formulation which involved; mental health assessment, dealing with referrals, complete mental health modules (MHOAT) such as K10, HoNOS, etc., report writing, conducting mental state assessments (MSE), conducting risk assessments and performing home visits.

(b) Therapy – Individual, Group, or Both which involved: counselling, consumer interventions, hospital inreach, visiting Burwood Respite, ward visits, interpreter assessments, phone counselling, participating in clinical and care reviews, attending care review meetings, providing feedback to consumers and families, supervising medication, providing individual therapy and assisting consumers with diaries or other monitoring charts, facilitating dialectical behaviour therapy groups (DBT), facilitate other psychological groups, DBT consultation, encourage consumers to engage in social activities, provide psychological therapies and psychoeducation.

(c) Continuity of Care which involved case consultation, facilitate consumer discharge, provide student clinical placements, receive clinical supervision, provide clinical supervision, attend handover meetings, attend MDT meetings and provide input regarding consumer care, clinical documentation and liaise with pharmacy.

7. The seventh step involved identifying both clinical and non-clinical generic activities required to facilitate care with External Providers that could be performed by all

professional groups. The activities identified were; care co-coordination (such as delivery of Webster packs to consumers), liaison with service providers, preparation for financial management order hearings, preparing applications required by various government and non-government agencies such as Social Housing, Centrelink, Guardianship Tribunal, Mental Health Review Tribunal and Local and District courts, assisting consumers with Legal Aid applications, consumer escorts and transport, follow-up with various government and non-government agencies, writing support letters for consumers and preparing and attending CTO hearings.

8. The final step was identifying the non-clinical generic activities required in Assertive Community Treatment, Carer Support, and Individual Support. The activities identified as required in assertive community treatment included; searching for consumers in the community after a breach of community treatment order (CTO) conditions, serving a CTO, completing a CTO and activating a breach of a CTO. The activities identified as being required for carer support were family meetings and providing support to carers. Activities required to facilitate individual support were; assisting consumers with GP appointments by providing transport, reminders and accompanying them, organising consumer belongings (which includes purchasing items, help with budgeting, delivery of items and storage of items during hospitalisations or evictions), assisting consumers in cleaning their rooms or units, creating repayment schedules for consumers who have difficulties in managing their finances independently and assisting consumers with shopping (which included transport, delivery of items, preparing shopping lists and menus and menus and budgeting).

The analysis was informative but certainly not exhaustive and there were some activities that the researcher (a clinician employed in the mental health service was able to identify as being performed by members of her professional group, and colleagues from other disciplines that were absent from the list.

The MHAC was developed to answer the following research questions:

1. Activities

1.1 What activities are performed by the five professional groups in the mental health service?

1.2 How much time is spent by each professional group on each of these activities?

2. Skills

2.1 Do the activities performed by each of the five professional groups require generic or specific skills?

In developing the MHAC the researcher considered asking participants to assign a numerical value (i.e. number of minutes) to each activity but considering that there are 95 activities in the MHAC this option was rejected and participants were asked to firstly indicate whether

they performed each of the 95 activities listed by placing a tick in the yes or no columns and secondly whether when they performed each activity it was primarily discipline specific or generic by placing a tick in the appropriate column. In order to answer question 1.2 participants were given a single question and asked to estimate the time they spent as a percentage performing discipline specific activities and generic activities. Last, participants were also asked to list any activities they performed that had not been included in the MHAC.

AREAS FOR EXAMINATION AND FURTHER QUESTIONING

1. **Clinical Process**
   - ***Entry* * –** **Assess/formulation**
   - ***Intervention* *-** **Therapy - Individual, Group or Both**
   - ***Maintenance* *-** **Continuity of Care**

2. **Non-Clinical**
   - ***Exit* *-** **Assertive Community Treatment**
   - ***Ongoing* * -** **Other Support - Individual, Carer**

3. **Both**
   - ***Open System* * -** **External Providers**

Appendix 13 Semi-Structured Interview

SEMI-STRUCTURED INTERVIEW

By the end of these interviews, I want to understand:

(a) what people believe the core skills of the five disciplines (Nursing, Occupational Therapy, Psychiatry, Psychology and Social work) are,
(b) how clear people are about the core skills of each professional group,
(c) if there is confusion about what the core skills of each professional group are, then I want to tease that out.
(d) **I want to understand *why people* believe certain disciplines can perform certain activities**.
(e) I want to understand who people think has competency to perform these activities.
(f) I want to know how it is that we determine which disciplines perform which activities.

This first section is not read out to interviewees. It is there to clarify my own thought processes and to ensure the interview questions will help me explore and achieve this understanding.

QUESTIONS:

1. Can you tell me a little bit about your role?

2. Have a look at the list of the top 5-10 skills/competencies within your own profession. These are skills identified as being specific to your profession based on the survey questionnaire we undertook with mental health. Do you agree, disagree, or want to add anything else to that list?

3. Now take a look at the top 5-10 skills/competencies for the other the other disciplines. What do you think? Is there anything there that surprises you? Why?

4. Which professional group do you see as the most similar to you and why?

5. Which do you see as least similar to you and why?

6. Going into the future, how can we achieve better role clarity between professions in allied health?

7. What do you think about the ways we are currently addressing the needs of consumers of mental health services?

8. How do you think professional groups in allied health should develop their skills in the future to meet the needs of consumers of mental health?

9. That's the end of my questions. Are there any other questions that you expected me to ask that I didn't or are there any other comments that you would like to make about the role of allied health in the provision of care to consumers of the mental health service?

Appendix 14 Expressions of Interest for Interview

EXPRESSION OF INTEREST – Semi structured interviews

STUDY TITLE: What is the role of allied health in the future of public mental health services?

We are also interested in conducting interviews with staff from the mental health service. We are interested in finding out about your experiences working in mental health and working with other professional groups.

I would like to be interviewed and my contact details are:

Name: _____

Position: _____

Email: _____

Contact number: _____

Please return this completed form in the yellow internal mail envelope provided.

Thank you for your time.

Appendix 15 Semi-Structured Interview Table

MH ACTIVITIES	NURSING	OCCUPATIONAL THERAPY	PSYCHIATRY	PSYCHOLOGY	SOCIAL WORK
1	Give Medication Oral and IMI	Living Skills Assessment	Medication Prescribing	Psychological Therapy	Create Repayment Schedule for Consumer
2	One-to-One Nursing Care	Assist Consumer with Shopping	Medication Review	DBT Group	Housing
3	Nurses Meeting	Assist Consumer Clean Room/ Accommodation	Pathology Requests	DBT Consultation	Assist Client with Legal Aid
4	Nursing Ward Rounds	Consumer Escort/Transport	Patient Medical Assessment/ Review	Individual Therapy	Assist Consumer Clean Room/ Accommodation
5	Supervise Client Bathing	Organise Consumer Belongings	Legal Activity (Schedules)	Attend GP Appointment with Consumer	Financial Management Order
6	Administer PRN Medication	Attend GP Appointment with Consumer	ccCHIP Referral	Groups	Organise Consumer Belongings
7	Assist Client Washing Clothes	Create Repayment Schedule for Consumer	Psychiatry Review in home with Registrar	Counselling	Application JD, DoH, DSP
8	Supervise Meal Times	Assist Client Washing Clothes	Liaise with Pharmacy	Psychoeducation	Attend GP Appointment with Consumer
9	Medication Supervision	Supervise Client Bathing	Clozapine Clinic	Breach CTO	Assist Consumer with Shopping
10	Clozapine Clinic	Visit Burwood Respite	CTO Hearing	Serve CTO	Consumer Escort/Transport

Appendix 16 Data Dictionary

Demographics-Question	Code	
1.Professional Group	**Prof**	
	1	Nursing
	2	Occupational Therapy
	3	Psychiatry
	4	Psychology
	5	Social Work
2.Highest Education Level	**Ed**	
	1	HSC
	2	Bachelor Degree
	3	Postgrad Certificate
	4	Postgrad Diploma
	5	Masters
	6	Professional Doctorate
	7	PhD
3.Age Group	**Age**	
	1	20-30
	2	31-40
	3	41-50
	4	51-60
	5	61-70
4.Gender	**Sex**	
	1	Female
	2	Male
5.Inpatient or Community	**Emp**	
	1	Inpatient
	2	Community
6.Years Employed	**YrsEmp**	
	1	1-5
	2	6-10
	3	11-15
	4	16-20
	5	21-25
	6	>26
7.Years' Experience in MH	**YrsExp**	
	1	1-5
	2	6-10
	3	11-15
	4	16-20
	5	21-25
	6	>26

Professional Identity

Question	Code	Rating
a.I feel like I am a member of this profession	PISa	**1-7**
b.I feel I have strong ties with members of this profession	PISb	**1-7**
c.I am often ashamed to admit that I am a member of this profession	PISc	**1-7**
d.I find myself making excuses for belonging to this profession	PISd	**1-7**
e.I try to hide that I am a member of this profession	PISe	**1-7**
f.I am pleased to belong to this profession	PISf	**1-7**
g.I can identify positively with members of this profession	PISg	**1-7**
h.Being a member of this profession is important to me	PISh	**1-7**
i.I feel I share characteristics with other members of this profession	PISi	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

Power Relationships

NURSING - Question	Code	Rating
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]	POWNa	**1-7**
b. Generally, this occupational group has the ability to apply coercive force when making decisions.	POWNb	**1-7**
c. In this organisation, employees of this occupational group can influence decisions about material resources.	POWNc	**1-7**
d. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.	POWNd	**1-7**
e. This occupational group has input when making decisions about material resources.	POWNe	**1-7**
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	POWNf	**1-7**
g. When making decisions about material resources, employees of this occupational group actively influence their superiors.	POWNg	**1-7**
h. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].	POWNh	**1-7**
i. Generally, I interact with members of this occupational group on a professional level only.	POWNi	**1-7**
j. Generally, I interact with members of this occupational group socially [outside of work hours].	POWNj	**1-7**
k. Generally, I choose to share my work breaks with members of this occupational group.	POWNk	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

OCCUPATIONAL THERAPY - Question	Code	Rating
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]	POWOTa	**1-7**
b. Generally, this occupational group has the ability to apply coercive force when making decisions.	POWOTb	**1-7**
c. In this organisation, employees of this occupational group can influence decisions about material resources.	POWOTc	**1-7**
d. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.	POWOTd	**1-7**
e. This occupational group has input when making decisions about material resources.	POWOTe	**1-7**
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	POWOTf	**1-7**
g. When making decisions about material resources, employees of this occupational group actively influence their superiors.	POWOTg	**1-7**
h. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].	POWOTh	**1-7**
i. Generally, I interact with members of this occupational group on a professional level only.	POWOTi	**1-7**
j. Generally, I interact with members of this occupational group socially [outside of work hours].	POWOTj	**1-7**
k. Generally, I choose to share my work breaks with members of this occupational group.	POWOTk	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

PSYCHIATRY - Question	Code	Rating
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]	POWMDa	**1-7**
b. Generally, this occupational group has the ability to apply coercive force when making decisions.	POWMDb	**1-7**
c. In this organisation, employees of this occupational group can influence decisions about material resources.	POWMDc	**1-7**
d. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.	POWMDd	**1-7**
e. This occupational group has input when making decisions about material resources.	POWMDe	**1-7**
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	POWMDf	**1-7**
g. When making decisions about material resources, employees of this occupational group actively influence their superiors.	POWMDg	**1-7**
h. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].	POWMDh	**1-7**
i. Generally, I interact with members of this occupational group on a professional level only.	POWMDi	**1-7**
j. Generally, I interact with members of this occupational group socially [outside of work hours].	POWMDj	**1-7**
k. Generally, I choose to share my work breaks with members of this occupational group.	POWMDk	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

PSYCHOLOGY - Question	Code	Rating
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]	POWPYa	**1-7**
b. Generally, this occupational group has the ability to apply coercive force when making decisions.	POWPYb	**1-7**
c. In this organisation, employees of this occupational group can influence decisions about material resources.	POWPYc	**1-7**
d. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.	POWPYd	**1-7**
e. This occupational group has input when making decisions about material resources.	POWPYe	**1-7**
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	POWPYf	**1-7**
g. When making decisions about material resources, employees of this occupational group actively influence their superiors.	POWPYg	**1-7**
h. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].	POWPYh	**1-7**
i. Generally, I interact with members of this occupational group on a professional level only.	POWPYi	**1-7**
j. Generally, I interact with members of this occupational group socially [outside of work hours].	POWPYj	**1-7**
k. Generally, I choose to share my work breaks with members of this occupational group.	POWPYk	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

SOCIAL WORK - Question	Code	Rating
a. Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]	POWSWa	**1-7**
b. Generally, this occupational group has the ability to apply coercive force when making decisions.	POWSWb	**1-7**
c. In this organisation, employees of this occupational group can influence decisions about material resources.	POWSWc	**1-7**
d. Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.	POWSWd	**1-7**
e. This occupational group has input when making decisions about material resources.	POWSWe	**1-7**
f. When making decisions about material resources employees of this occupational group receive high priority from our management team.	POWSWf	**1-7**
g. When making decisions about material resources, employees of this occupational group actively influence their superiors.	POWSWg	**1-7**
h. Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].	POWSWh	**1-7**
i. Generally, I interact with members of this occupational group on a professional level only.	POWSWi	**1-7**
j. Generally, I interact with members of this occupational group socially [outside of work hours].	POWSWj	**1-7**
k. Generally, I choose to share my work breaks with members of this occupational group.	POWSWk	**1-7**

Rating	Meaning
1	**Strongly Agree**
2	**Disagree**
3	**Somewhat Disagree**
4	**Neither Agree or Disagree**
5	**Somewhat Agree**
6	**Agree**
7	**Strongly Agree**

Mental Health Activities

Clinical Activities – Part 1	Code	Rating
a. Patient Medical Assessment Review	A1a	1 or 2
b. Review of Medical/Blood Results	A1b	1 or 2
c. Pathology Requests	A1c	1 or 2
d. Medication Review	A1d	1 or 2
e. ccCHIP Referral Form Completion	A1e	1 or 2
f. Psychiatry Review in Home with Registrar	A1f	1 or 2
g. Medication Prescribing	A1g	1 or 2
h. Legal Activity (MHA) Schedules	A1h	1 or 2
i. One-to-One Nursing Care	A1i	1 or 2
j. Administer PRN Medication	A1j	1 or 2
k. Nurses Meeting	A1k	1 or 2
l. Clozapine Clinic	A1l	1 or 2
m. Nursing Ward Rounds	A1m	1 or 2
n. Supervise Consumer Bathing	A1n	1 or 2
o. Assist Consumer Washing Clothes	A1o	1 or 2
p. Give Medication Oral and IMI	A1p	1 or 2
q. Supervise Meal Times	A1q	1 or 2
r. Living Skills Assessment	A1r	1 or 2

Rating	
1	**Yes**
2	**No**

Clinical Activities – Part 2	Code	Professional Group	Rating
a. Patient Medical assessment Review	A12a	1-6	1 or 2
b. Review of Medical/Blood Results	A12b	1-6	1 or 2
c. Pathology Requests	A12c	1-6	1 or 2
d. Medication Review	A12d	1-6	1 or 2
e. ccCHIP Referral Form Completion	A12e	1-6	1 or 2
f. Psyhciatry Review in Home with Registrar	A12f	1-6	1 or 2
g. Medication Prescribing	A12g	1-6	1 or 2
h. Legal Activity (MHA) Schedules	A12h	1-6	1 or 2
i. One-to-One Nursing Care	A12i	1-6	1 or 2
j. Administer PRN Medication	A12j	1-6	1 or 2
k. Nurses Meeting	A12k	1-6	1 or 2
l. Clozapine Clinic	A12l	1-6	1 or 2
m. Nursing Ward Rounds	A12m	1-6	1 or 2
n. Supervise Consumer Bathing	A12n	1-6	1 or 2
o. Assist Consumer Washing Clothes	A12o	1-6	1 or 2
p. Give Medication Oral and IMI	A12p	1-6	1 or 2
q. Supervise Meal Times	A12q	1-6	1 or 2
r. Living Skills Assessment	A12r	1-6	1 or 2

Professional Group	
1	Nursing
2	Occupational Therapy
3	Psychiatry
4	Psychology
5	Social Work
6	Generic

Rating	
1	Yes
2	No

Both Clinical Activities and Non-Clinical Generic Activities – Part 1	Code	Rating
a. Mandatory Training	A2a	1 or 2
b. Professional Development	A2b	1 or 2
c. Journal Club	A2c	1 or 2
d. Teaching	A2d	1 or 2
e. Research	A2e	1 or 2
f. Learning & Development	A2f	1 or 2
g. Outing with Consumers	A2g	1 or 2
h. Review of Patient Files	A2h	1 or 2
i. Powerchart Entries	A2i	1 or 2
j. Correspondence with Senior Clinician and Others	A2j	1 or 2
k. Support Distressed Consumers	A2k	1 or 2
l. GP Collaborative Projects Meeting	A2l	1 or 2

Rating	
1	**Yes**
2	**No**

Both Clinical Activities and Non-Clinical Generic Activities – Part 2	Code	Professional Group	Rating
a. Mandatory Training	A22a	1-6	1 or 2
b. Professional Development	A22b	1-6	1 or 2
c. Journal Club	A22c	1-6	1 or 2
d. Teaching	A22d	1-6	1 or 2
e. Research	A22e	1-6	1 or 2
f. Learning & Development	A22f	1-6	1 or 2
g. Outing with Consumers	A22g	1-6	1 or 2
h. Review of Patient Files	A22h	1-6	1 or 2
i. Powerchart Entries	A22i	1-6	1 or 2
j. Correspondence with Senior Clinician and Others	A22j	1-6	1 or 2
k. Support Distressed Consumers	A22k	1-6	1 or 2
l. GP Collaborative Projects Meeting	A22l	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Non-Clinical Generic Activities - Part 1	Code	Rating
a. Management	A3a	1 or 2
b. Staff Performance Management	A3b	1 or 2
c. Administrative Tasks	A3c	1 or 2
d. Emails and Correspondence	A3d	1 or 2
e. CERNER	A3e	1 or 2
f. Orientation New Staff	A3f	1 or 2
g. Provide Operational Supervision	A3g	1 or 2
h. Receive Operational Supervision	A3h	1 or 2
i. Follow-up Consumer	A3i	1 or 2
j. Meeting- Operational Matters	A3j	1 or 2

Rating	
1	**Yes**
2	**No**

Non-Clinical Generic Activities - Part 2	Code	Professional Group	Rating
a. Management	A32a	1-6	1 or 2
b. Staff Performance Management	A32b	1-6	1 or 2
c. Administrative Tasks	A32c	1-6	1 or 2
d. Emails and Correspondence	A32d	1-6	1 or 2
e. CERNER	A32e	1-6	1 or 2
f. Orientation New Staff	A32f	1-6	1 or 2
g. Provide Operational Supervision	A32g	1-6	1 or 2
h. Receive Operational Supervision	A32h	1-6	1 or 2
i. Follow-up Consumer	A32i	1-6	1 or 2
j. Meeting- Operational Matters	A32j	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Clinical Process – Assessment & Formulation - Part 1	Code	Rating
a. Mental Health Assessment	A4a	1 or 2
b. Referrals	A4b	1 or 2
c. Complete MHOAT Modules. K10, HoNOS, etc.	A4c	1 or 2
d. Report Writing	A4d	1 or 2
e. Mental State Examination (MSE)	A4e	1 or 2
f. Risk Assessment	A4f	1 or 2
g. Home Visits	A4g	1 or 2

Rating	
1	**Yes**
2	**No**

Clinical Process – Assessment & Formulation - Part 2	Code	Professional Group	Rating
a. Mental Health Assessment	A42a	1-6	1 or 2
b. Referrals	A42b	1-6	1 or 2
c. Complete MHOAT Modules. K10, HoNOS, etc.	A42c	1-6	1 or 2
d. Report Writing	A42d	1-6	1 or 2
e. Mental State Examination (MSE)	A42e	1-6	1 or 2
f. Risk Assessment	A42f	1-6	1 or 2
g. Home Visits	A42g	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Clinical Process - Therapy – Part 1	Code	Rating
a. Counselling	A5a	1 or 2
b. Consumer Intervention	A5b	1 or 2
c. Hospital Inreach	A5c	1 or 2
d. Visit Burwood Respite	A5d	1 or 2
e. Ward Visit	A5e	1 or 2
f. Interpreter Assessment	A5f	1 or 2
g. Phone Counselling	A5g	1 or 2
h. Clinical/care Review	A5h	1 or 2
i. Care Review Meeting	A5i	1 or 2
j. Feedback	A5j	1 or 2
k. Medication Supervision	A5k	1 or 2
l. Individual Therapy	A5l	1 or 2
m. Create Food Diary Template	A5m	1 or 2
n. Encourage Consumer to Engage in Social Activity	A5n	1 or 2
o. Psychological Therapy	A5o	1 or 2
p. Psychoeducation	A5p	1 or 2
q. DBT Group	A5q	1 or 2
r. Groups	A5r	1 or 2
s. DBT Consultation	A5s	1 or 2

Rating	
1	**Yes**
2	**No**

Clinical Process - Therapy – Part 2	Code	Professional Group	Rating
a. Counselling	A52a	1-6	1 or 2
b. Consumer Intervention	A52b	1-6	1 or 2
c. Hospital Inreach	A52c	1-6	1 or 2
d. Visit Burwood Respite	A52d	1-6	1 or 2
e. Ward Visit	A52e	1-6	1 or 2
f. Interpreter Assessment	A52f	1-6	1 or 2
g. Phone Counselling	A52g	1-6	1 or 2
h. Clinical/care Review	A52h	1-6	1 or 2
i. Care Review Meeting	A52i	1-6	1 or 2
j. Feedback	A52j	1-6	1 or 2
k. Medication Supervision	A52k	1-6	1 or 2
l. Individual Therapy	A52l	1-6	1 or 2
m. Create Food Diary Template	A52m	1-6	1 or 2
n. Encourage Consumer to Engage in Social Activity	A52n	1-6	1 or 2
o. Psychological Therapy	A52o	1-6	1 or 2
p. Psychoeducation	A52p	1-6	1 or 2
q. DBT Group	A52q	1-6	1 or 2
r. Groups	A52r	1-6	1 or 2
s. DBT Consultation	A52s	1-6	1 or 2

Professional Group	
1	Nursing
2	Occupational Therapy
3	Psychiatry
4	Psychology
5	Social Work
6	Generic

Rating	
1	Yes
2	No

Clinical Process – Continuity of Care - Part 1	Code	Rating
a. Case Consultation	A6a	1 or 2
b. Consumer Discharge	A6b	1 or 2
c. Student Clinical Placement	A6c	1 or 2
d. Receive Clinical Supervision	A6d	1 or 2
e. Provide Clinical Supervision	A6e	1 or 2
f. Handover Meeting	A6f	1 or 2
g. MDT Input over Consumer Care	A6g	1 or 2
h. Clinical Notes/Documentation	A6h	1 or 2
i. Liaise with Pharmacy	A6i	1 or 2

Rating	
1	**Yes**
2	**No**

Clinical Process – Continuity of Care - Part 2	Code	Professional Group	Rating
a. Case Consultation	A62a	1-6	1 or 2
b. Consumer Discharge	A62b	1-6	1 or 2
c. Student Clinical Placement	A62c	1-6	1 or 2
d. Receive Clinical Supervision	A62d	1-6	1 or 2
e. Provide Clinical Supervision	A62e	1-6	1 or 2
f. Handover Meeting	A62f	1-6	1 or 2
g. MDT Input over Consumer Care	A62g	1-6	1 or 2
h. Clinical Notes/Documentation	A62h	1-6	1 or 2
i. Liaise with Pharmacy	A62i	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Activities Related to External Providers - Part 1	Code	Rating
a. Care Co-Ordination (e.g. deliver Webster Pack)	A7a	1 or 2
b. Liaison with service Providers	A7b	1 or 2
c. Financial Management Order Hearing	A7c	1 or 2
d. Applications JD, DoH, DSP	A7d	1 or 2
e. Assist Consumer with Legal Aid	A7e	1 or 2
f. Consumer Escort/Travel	A7f	1 or 2
g. Follow-Up Housing, Other Forms	A7g	1 or 2
h. Writing Support Letters	A7h	1 or 2
i. CTO Hearing	A7i	1 or 2

Rating	
1	**Yes**
2	**No**

Activities Related to External Providers - Part 2	Code	Professional Group	Rating
a. Care Co-Ordination (e.g. deliver Webster Pack)	A72a	1-6	1 or 2
b. Liaison with service Providers	A72b	1-6	1 or 2
c. Financial Management Order Hearing	A72c	1-6	1 or 2
d. Applications JD, DoH, DSP	A72d	1-6	1 or 2
e. Assist Consumer with Legal Aid	A72e	1-6	1 or 2
f. Consumer Escort/Travel	A72f	1-6	1 or 2
g. Follow-Up Housing, Other Forms	A72g	1-6	1 or 2
h. Writing Support Letters	A72h	1-6	1 or 2
i. CTO Hearing	A72i	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Community and Support Activities - Part 1	Code	Rating
a. Search for Consumer in Community	A8a	1 or 2
b. Complete CTO	A8b	1 or 2
c. Serve CTO	A8c	1 or 2
d. Breach CTO	A8d	1 or 2
e. Provide Carer Support	A8e	1 or 2
f. Family Meeting	A8f	1 or 2
g. Attend GP Appointment with Consumer	A8g	1 or 2
h. Organise Consumer Belongings	A8h	1 or 2
i. Assist Consumer Clean Room/Unit/ Accommodation	A8i	1 or 2
j. Create Repayment schedule for Consumer	A8j	1 or 2
k. Assist Consumer with Shopping	A8k	1 or 2

Rating	
1	**Yes**
2	**No**

Community and Support Activities - Part 2	Code	Professional Group	Rating
a. Search for Consumer in Community	A82a	1-6	1 or 2
b. Complete CTO	A82b	1-6	1 or 2
c. Serve CTO	A82c	1-6	1 or 2
d. Breach CTO	A82d	1-6	1 or 2
e. Provide Carer Support	A82e	1-6	1 or 2
f. Family Meeting	A82f	1-6	1 or 2
g. Attend GP Appointment with Consumer	A82g	1-6	1 or 2
h. Organise Consumer Belongings	A82h	1-6	1 or 2
i. Assist Consumer Clean Room/Unit/ Accommodation	A82i	1-6	1 or 2
j. Create Repayment schedule for Consumer	A82j	1-6	1 or 2
k. Assist Consumer with Shopping	A82k	1-6	1 or 2

Professional Group	
1	**Nursing**
2	**Occupational Therapy**
3	**Psychiatry**
4	**Psychology**
5	**Social Work**
6	**Generic**

Rating	
1	**Yes**
2	**No**

Activities	Code	Percentage
Discipline Specific	**DisAct**	
Generic	**GenAct**	

Appendix 17 Data Template – Sample Pages

Variable	Variable Label	Level	Level Label
Prof	Professional Group	1	Nursing
		2	Occupational Therapy
		3	Psychiatry
		4	Psychology
		5	Social Work
Ed	Highest Education Level	1	HSC
		2	Bachelor Degree
		3	Postgrad Certificate
		4	Postgrad Diploma
		5	Masters
		6	Professional Doctorate
		7	PhD
Age	Age Group	1	20-30
		2	31-40
		3	41-50
		4	51-60
		5	61-70

Sex	Gender	1 Female 2 Male
Emp	Inpatient or Community	1 Inpatient 2 Community
YrsEmp	Years Employed	1 1 to 5 2 6 to 10 3 11 to 15 4 16-20 5 21-25 6 >26
YrsExp	Years Experience in MH	1 1 to 5 2 6 to 10 3 11 to 15 4 16-20 5 21-25 6 >26

PISa	I feel like I am a member of this profession
PISb	I feel I have strong ties with members of this profession
PISc	I am often ashamed to admit that I am a member of this profession
PISd	I find myself making excuses for belonging to this profession
PISe	I try to hide that I am a member of this profession
PISf	I am pleased to belong to this profession
PISg	I can identify positively with members of this profession
PISh	Being a member of this profession is important to me
PISi	I feel I share characteristics with other members of this profession

POWNa	Generally, this occupational group has the ability to apply a high level of direct economic reward or punishment [money, goods, services, etc.]
POWNb	Generally, this occupational group has the ability to apply coercive force when making decisions
POWNc	In this organisation, employees of this occupational group can influence decisions about material resources
POWNd	Generally, this occupational group uses its social influence [on reputation, prestige, etc., through media, etc.] to obtain its will.
POWNe	This occupational group has input when making decisions about material resources.
POWNf	When making decisions about material resources employees of this occupational group receive high priority from our management team.
POWNg	When making decisions about material resources, employees of this occupational group actively influence their superiors.
POWNh	Generally, this occupational group uses access to formal processes to obtain its will [legal, professional association etc.].
POWNi	Generally, I interact with members of this occupational group on a professional level only.
POWNj	Generally, I interact with members of this occupational group socially [outside of work hours].
POWNk	Generally, I choose to share my work breaks with members of this occupational group.

Instructions

1. Variable names should start with a letter
2. Variable names should not have spaces between
3. Variable names should not have any character except letters and numbers
4. Variable names should not be more than 10 characters long
5. Variable names should be all in lower case.
5. The variable names in the dictionary should exactly match that in the dataset should be all lower case
6. Missing values should be left blank

Appendix 18 SLHD Seeding Grant Award

Jennifer Alison PhD, MSc (with Distinction), Dip Phty, FThorSoc, MAPA

Professor of Respiratory Physiotherapy
Clinical & Rehabilitation Sciences Research Group
Faculty of Health Sciences
The University of Sydney

Professor of Allied Health (Chronic Diseases)
Conjoint, Sydney Local Health District &
The University of Sydney

1st December, 2015

Dear Lila,

It is with great pleasure that I write to inform you that you are a successful recipient of a Sydney Local Health District Allied Health Seeding Grant. The grant is worth $5,000. In order for transfer of funds to occur you will need to provide the ethics approval letter for your project.

I will be in touch with you shortly to discuss the funding arrangements.

Heartiest congratulations. My hope is that this seed funding will lead to important research findings.

Kind regards,

Jennifer Alison
PhD, MSc (with Distinction), Dip Phty

Physiotherapy
Faculty of Health Sciences
Room 166, O Block
75 East Street
LIDCOMBE NSW 2141
Australia

T +61 2 9351 9371
F +61 2 9351 9601
E jennifer.alison@sydney.edu.au
sydney.edu.au

ABN 15 211 513 464
CRICOS 00026A

Appendix 19 AHRF 2017 Best Abstract Award

THE UNIVERSITY OF SYDNEY

NSW GOVERNMENT Health Sydney Local Health District

Professor Jennifer Alison *PhD, MSc (with Distinction), Dip Phty, FThorSoc, MAPA*

Professor of Respiratory Physiotherapy
Faculty of Health Sciences

Professor of Allied Health (Chronic Diseases) Conjoint
Sydney Local Health District

Lila Vrklevski
Director of Psychology
Sydney Local Health District

1st December, 2017

Dear Ms Vrklevski,

It is with pleasure that I advise you that your abstract titled *Cooperation, conflict and care: investigating professional roles, identity, power and patient care in mental health services* was the top ranking abstract submitted to the Sydney Local Health District Allied Health Research Forum 2017.

Congratulations on your work.

Kind regards,

Professor Jennifer Alison

Physiotherapy
Faculty of Health Sciences
Room 166, O Block
75 East Street
LIDCOMBE NSW 2141
Australia

T +61 2 9351 9371
F +61 2 9351 9601
E jennifer.alison@sydney.edu.au
sydney.edu.au

ABN 15 211 513 464
CRICOS 00026A

Appendix 20 Ethics Application Approval Phase 1 Archival Data SLHD

Contact: Sydney Local Health District (SLHD)
Human Research Ethics Committee – CRGH
Building 75
Concord Repatriation General Hospital (CRGH)
Hospital Road
CONCORD NSW 2139
Telephone: *(02) 9767 5622*
Email: *ethicscrgh@email.cs.nsw.gov.au*

CONCORD
REPATRIATION GENERAL
HOSPITAL

28 May 2013

Ms Lil Vrklevski
Concord Centre for Mental Health
Level 1, Building 109
CONCORD RGH

Dear Ms Vrklevski,

Re: **ACCESS TO HEALTH DATA**
Analysis of archival health data to give a profile of the type of patient group most often seen in public sector Mental Health Services

Thank you for your request for approval for access to health data at Concord Hospital for the purpose of the above project. Approval for your request has been granted by the Chairman on behalf of the SLHD Human Research Ethics Committee – CRGH, subject to the following conditions:

- *Approval is valid for 12 months and will lapse after 31 May 2014. You are asked to apply to the Ethics Committee again if extension of approval is required after this time.*
- *Patients are not to be contacted as part of this project.*
- *All data removed from the medical record is to be de-identified.*

If people other than yourself wish to access medical records for the purpose described above, a copy of this approval letter must be presented by them to Medical Records at the time of request.

Please contact Casemix and Statistics (on 9767 6084) to discuss your request, and quote the following as your Ethics approval number:

CH 62/6/2013-086

Yours sincerely

Phil Sanders
Administration Officer
SLHD Human Research Ethics Committee – CRGH
cc: Michael Meller, Casemix and Statistics, CRGH

C:\……\Medical Records\2013-086 approval letter

Office/Postal
Research Office
Concord Repatriation General Hospital
Level 1, Building 75
Hospital Road, Concord NSW 2139

Phone
(02) 9767 6233
(02) 9767 5622

Fax
(02) 9767 6569

E-mail
ethicscrgh @email.cs.nsw.gov.au
tumev@email.cs.nsw.gov.au
www.cs.nsw.gov.au/concord/departs/ethics

Appendix 21 Final Ethics Approval Letter LNR –SLHD HREC

Contact: Sydney Local Health District Human Research Ethics Committee – CRGH
Concord Repatriation General Hospital (CRGH)
Concord NSW 2139
Telephone: *(02) 9767 5622*
Email: *crgh.ethics@sswahs.nsw.gov.au*

Our Ref:

CONCORD
REPATRIATION GENERAL
HOSPITAL

23 July 2015

Ms Lil Vrklevski
Unit 2 Kirkbride
Concord Centre for Mental Health
CONCORD RGH

Dear Ms Vrklevski,

Re: LNR/15/CRGH/144 (CH62/6/2015-123)
What is the role of allied health in the future of the public sector mental health service?

Thank you for submitting the above project for single ethical and scientific review. This project was first considered by the Executive Ethical Review Panel of the Sydney Local Health District Human Research Ethics Committee – CRGH at its meeting held on 15 July 2015. This Human Research Ethics Committee (HREC) has been accredited by the NSW Ministry of Health as a lead HREC under the model for single ethical and scientific review.

This lead HREC is constituted and operates in accordance with the National Health and Medical Research Council's *National Statement on Ethical Conduct in Human Research* and the *CPMP/ICH Note for Guidance on Good Clinical Practice.*

I am pleased to advise that the Committee has granted ethical approval of this research project.

The documents reviewed and approved include:

- **LNR Application Locked Code AU/6/84EF114**
- **Research Proposal**
- **Participant Information Sheet and Consent Form Main study version 1 dated 17 July 2015**
- **Participant Information Sheet and Consent Form Phase 2 version 1 dated 17 July 2015**

The HREC has provided ethical and scientific approval for the following sites:

1. Concord Repatriation General Hospital (Concord Centre for Mental Health)

You are reminded that this letter constitutes ethical approval only. You must not commence this research project at Concord Hospital until a Site Specific Application has been reviewed and approved and separate authorisation from the Chief Executive or delegate has been obtained

2. Royal Prince Alfred Hospital (Professor Marie Bashir Centre)
3. Camperdown Community Health Centre – Mental Health Service
4. Canterbury Community Health Centre – Mental Health Service
5. Croydon Community Health Centre – Mental Health Service
6. Marrickville Community Health Centre – Mental Health Service

7. Redfern Community Health Centre – Mental Health Service

Please forward a copy of this letter to the site investigators for submission to the relevant Research Governance Officer.

Please note the following conditions of approval:

1. You will immediately report anything which might warrant review of ethical approval of the project in the specified format, including unforeseen events that might affect continued ethical acceptability of the project, (including Serious Adverse Events).

2. Proposed changes to the research protocol, conduct of the research, or length of HREC approval will be provided to the HREC for review in the specified format.

3. You will notify the HREC, giving reasons, if the project is discontinued at a site before the expected date of completion.

4. You will provide an annual report to the HREC, and at completion of the study in the specified format.

5. You will adhere to the study protocol at all times.

HREC approval is valid for five (5) years subject to the supply of an annual progress report. The first report should be sent to the Concord Hospital Research Office by **31/7/2016.**

Should you have any queries about the HREC's consideration of your project please contact the Executive Officer - (02) 9767-5622. The HREC Terms of Reference, Standard Operating Procedures, membership and standard forms are available from the website: www.sswahs.nsw.gov.au/concord/ethics .

We wish you every success in your research.

Please quote the above file number in all correspondence.

Yours sincerely,

Mr Leo Turner
Deputy Chairman
SLHD/Human Research Ethics Committee – CRGH

Please complete the boxes below and return a copy of this page to the Concord Hospital Research Office:

☑ ***I acknowledge and accept the Conditions of Ethical Approval.***

☑ ***I will not commence this project at any site until separate written authorisation from the Chief Executive or delegate of that site has been obtained***

Lila Petar VRKLEVSKI — 27-7-2015

Printed Name **Signature** **Date**
Chief Investigator

Appendix 22 Final Ethics Approval Letter SSa CRGH

Contact: *Sydney Local Health District (SLHD)*
Research Office
Concord Repatriation General Hospital (CRGH)
Building 20, Hospital Road
Concord NSW 2139
Telephone: (02) 9767 5622
Email: Virginia.Turner@sswahs.nsw.gov.au
Our Ref: *(SSA Authorisation LNRSSA/15/CRGH/145)*

CONCORD
REPATRIATION GENERAL
HOSPITAL

27 July, 2015

Ms Lila Vrklevski
Director Psychology
Concord Centre for Mental Health
CONCORD RGH

Dear Lil,

HREC reference number: LNR/15/CRGH/144
SSA reference number: LNRSSA/15/CRGH/145
Project title: What is the role of allied health in the future of the public sector mental health service?

Thank you for submitting an application for authorisation of this project.

I am pleased to inform you that the delegate of the Chief Executive has granted authorisation for this study to take place at the following site:

Concord Repatriation General Hospital

The participant documents approved for use at this site are:

Participant Information Sheet & Consent Form (Main study) - Version 1 dated 17 July 2015

Participant Information Sheet & Consent Form (Phase 2) - Version 1 dated 17 July 2015

The following conditions apply to this research project. These are additional to those conditions imposed by the Human Research Ethics Committee that granted ethical approval:

1. Proposed amendments to the research protocol or conduct of the research which may affect the ethical acceptability of the project, and which are submitted to the lead HREC for review, are copied to this office.

2. Proposed amendments to the research protocol or conduct of the research which may affect the ongoing site acceptability of the project, are to be submitted to this office.

Yours sincerely,

Virginia Turner
Research Governance Officer
Concord Repatriation General Hospital

Appendix 23 Final Ethics Approval Letter SSa RPAH

ADDRESS FOR ALL CORRESPONDENCE
RESEARCH DEVELOPMENT OFFICE
ROYAL PRINCE ALFRED HOSPITAL
CAMPERDOWN NSW 2050

TELEPHONE: (02) 9515 7899
FACSIMILE: (02) 9515 7176
EMAIL: maree.larkin@sswahs.nsw.gov.au
REFERENCE: X15-0273

NSW GOVERNMENT Health
Sydney Local Health District

29 July 2015

Ms Lila Vrklevski
Director Psychology SLHD
Unit 2 Kirkbride
Concord Centre for Mental Health
Hospital Road
CONCORD NSW 2137

Dear Ms Vrklevski,

Re: Protocol No X15-0273 - "What is the role of allied health in the future of the public sector mental health service?"

LNR/15/CRGH/144 **LNRSSA/15/RPAH/374**

Thank you for submitting a Site Specific Assessment Form for this low and negligible risk study. I am pleased to inform you that authorisation has been granted for it to be undertaken at the following sites within the SLHD (RPAH Zone):

- Camperdown Community Health Centre
- Canterbury Community Health Centre
- Croydon Community Health Centre
- Marrickville Community Health Centre
- Redfern Community Health Centre
- RPAH Professor Marie Bashir Centre

The approved information and consent documents for use at this site are:

- ***Participant Information Sheet and Consent Form – Main Study (Version 1, 17 July 2015)***
- ***Participant Information Sheet and Consent Form – Phase 2 (Version 1, 17 July 2015)***

The following conditions apply to this research study. These are additional to those conditions imposed by the human research ethics committee (HREC) that granted ethical approval:

1. A copy of the annual report and any other reports to the approving HREC, accompanied by a copy of the HREC's acknowledgement letter, should be provided to me for review.
2. Please insert the local study number X15-0273 in the above Information Sheets.
3. Proposed amendments to the research protocol or conduct of the research, which may affect the ethical acceptability of the study and which are submitted to the lead HREC for review, must be copied to me.

4. Proposed amendments to the research protocol or conduct of the research, which may affect the ongoing site acceptability of the study, must be submitted to me.

I wish you every success in your research.

Yours sincerely,

Maree Larkin
Research Governance Officer
SLHD (RPAH Zone)
RGO - Maree\CORRES\X15-0273

Appendix 24 University of Tasmania HREC Letter

Office of Research Services
University of Tasmania
Private Bag 1
Hobart Tasmania 7001
Telephone + 61 3 6226 7479
Facsimile + 61 3 6226 7148
Email Human.Ethics@utas.edu.au
www.research.utas.edu.au/human_ethics/

HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

UTAS

17 August 2015

Assoc Prof Jeff Patrick
University of Tasmania

Sent via email

Dear Assoc Prof Patrick

REF NO: H0015159
TITLE: What is the role of allied health in the future of the public sector mental health service?

Document	***Version***	***Date***
Tasmanian HREC Prior Approval Application From	-	-
Tasmanian HREC Privacy Form	-	-
NEAF as submitted to Sydney Local Health District HREC (LNR and SSA)	-	7 July 2015
Approval - Sydney Local Health District HREC - Concord Repatriation General Hospital	-	27 July 2013
Approval - Sydney Local Health District HREC - Concord Repatriation General Hospital - approval to Access to Health Data	-	28 May 2013
Participant Information and Consent Form – Main Research Study	Version1	17 July 2015
Participant Information and Consent Form – Phase 2	Version1	17 July 2015
Research Proposal	-	-
Participant Instructions – Phase 2	-	-

The Tasmanian Health and Medical Human Research Ethics Committee considered and approved the above documentation on **12 August 2015** to be conducted at the following site(s):

Sydney Local Health District Mental Health Service

Please ensure that all investigators involved with this project have cited the approved versions of the documents listed within this letter and use only these versions in conducting this research project.

This approval constitutes ethical clearance by the Health and Medical HREC. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approvals of other bodies or authorities

Appendix 25 Information to Participants Main Research

Mental Health Services

INFORMATION FOR PARTICIPANTS

STUDY TITLE: What is the role of allied health in the future of the public mental health service?

INVESTIGATOR: The research is being conducted by Lil Vrklevski, Director Psychology SLHD: Telephone Number 97678757 for the degree of Doctor of Philosophy under the supervision of Dr Kathy Eljiz and Associate Professor Angela Martin, School of Business, University of Tasmania.

INTRODUCTION:

You are invited to take part in a research study examining the role of allied health in the future of the public mental health service. This Participant Information Sheet will tell you about what is involved in the study and help you decide whether or not you wish to take part. Please read this information carefully. If there is anything, you do not understand or if you feel you need more information about anything, please ask.

WHY HAVE I BEEN ASKED TO TAKE PART?

You have been invited to take part in this research because you are a staff member belonging to one of the five (5) professional groups most commonly represented in public mental health services.

WHAT IS THE PURPOSE OF THIS RESEARCH?

The purpose of the research is to explore how the different professional groups in the mental health service negotiate with each other in the provision of care to consumers.

DO I HAVE TO TAKE PART IN THE STUDY?

Taking part in any research is entirely voluntary. If you do decide to take part, you can withdraw at any time without having to give a reason. Please be assured that, whatever your decision, it will not affect your relationship with the principal investigator or your relationship with the SLHD mental health service. If you decide to withdraw during the middle of the interview or at completion, the principal interviewer will erase the recording.

WHAT DO I HAVE TO DO?

If you decide to participate, you will be required to complete four questionnaires and you may also be interviewed using a semi-structured interview protocol. The questions relate to your experiences of working in the mental health service as a member of a particular professional group. We are conducting both survey questionnaires and semi-structured interviews. You may choose to participate by completing either a survey questionnaire, participating in a semi-structured interview or both. The survey questionnaire should take approximately twenty-five (25) minutes to complete. Please return the completed survey questionnaire in the large yellow internal mail envelope enclosed in this pack.

The semi-structured interviews will take about another thirty to forty five (30-45) minutes to complete. If you would like to participate in the interview, please fill in the yellow expression of interest form and return in the small yellow internal mail envelope enclosed in this pack. Interviews will be electronically recorded and later transcribed and scored. The interview questions will relate to your personal experiences and it is anticipated they should not cause any distress.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

While taking part in the study may not be of direct benefit to you the research study may further our knowledge about the provision of care to consumers of the mental health service and how the different professional groups negotiate with each other in the provision of care to consumers of the mental health service.

WHAT ARE THE RISKS OF TAKING PART?

There are no identified risks of taking part other than the time it will take to participate slightly increasing your workload.

CONFIDENTIALITY

By signing the consent form, you are agreeing to participate in this study. All details obtained by the principal investigator will remain confidential. Only Lil Vrklevski will have access to the questionnaire data and the recordings and transcripts of the interviews. The data will be locked and stored in a secure location. A report of this study may be submitted for publication but individual participants will not be identifiable.

FURTHER INFORMATION

When you have read this information, Lil Vrklevski will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Lil Vrklevski on (02) 97678757 or lil.vrklevski@sswahs.nsw.gov.au. This information sheet is for you to keep.

This study has been approved by the Human Research Ethics Committee - CRGH of the Sydney Local Health District LNR/15/CRGH/144; LNRSSA/15/CRGH/145; LNRSSA/15/RPAH/If you have any concerns or complaints about the conduct of the research study, you may contact the Executive Officer of the Ethics Committee, on (02) 9767 5622.

This study has been approved by the Tasmanian Health and Medical Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote [insert HREC project number].

The conduct of this study at the Professor Marie Bashir Centre at RPAH and the Camperdown, Canterbury, Croydon, Marrickville and Redfern Community Health Centres has been authorised by the SLHD (RPAH Zone). Any person with concerns or complaints about the conduct of this study may contact the Research Governance Officer on (02) 9515 57899 and quote protocol number; X15-0273.

What is the role of allied health in the future of the public mental health service?

PARTICIPANT CONSENT FORM*

(*please only fill in if you participate in an interview)

I, ……..……..……[name]

of……[address]

have read and understood the Information for Participants for the above named research study and have discussed the study with ……
……...

- I have been made aware of the procedures involved in the study, including any known or expected inconvenience or risk, and of their implications as far as they are currently known by the researchers.

- I freely choose to participate in this study and understand that I can withdraw at any time.

- I also understand that the research study is strictly confidential.

- I hereby agree to participate in this research study.

Name (Please Print): ..... .

Signature:..... **Date:** .....

Name of Person who conducted informed consent discussion (Please Print):

……

Signature of Person who conducted informed consent discussion:

Signature:..... **Date:** .....

Appendix 26 Demographic Data

Demographics Data

Figure 1 presents data on staffing of the SLHD mental health service.

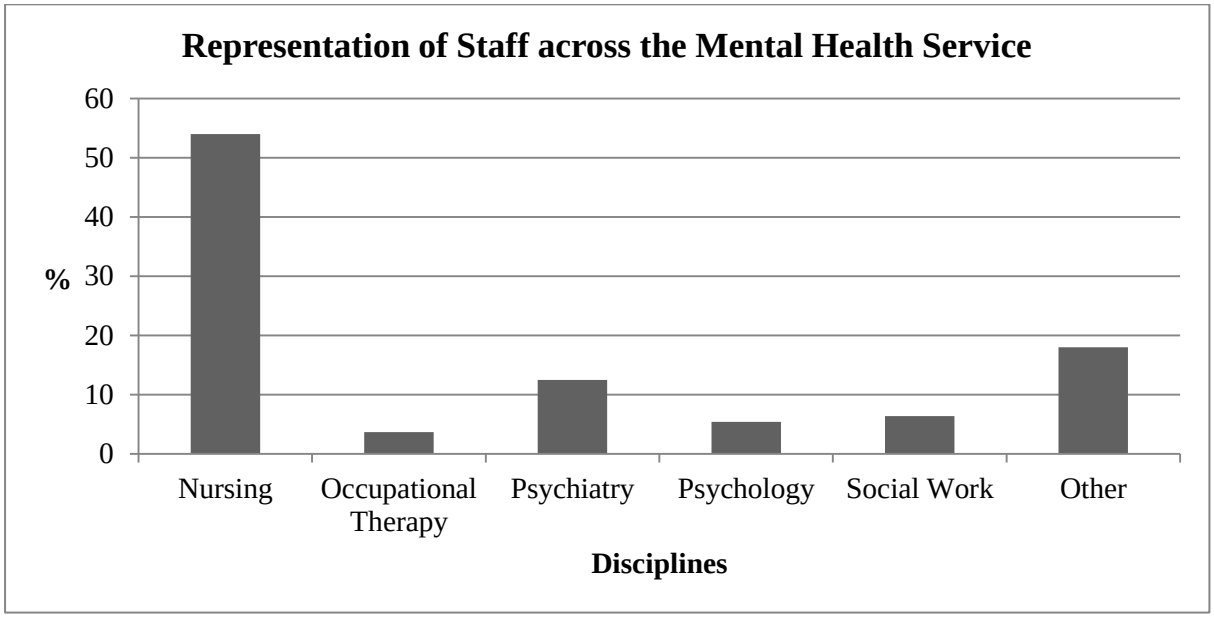


Figure 1: Representation of staff across the mental health service

Figure 2 presents data on the number of staff from each discipline that participated in this study. The dark grey column shows the total number of staff employed in each discipline. The light grey column shows the number of staff from each discipline that participated in the study.

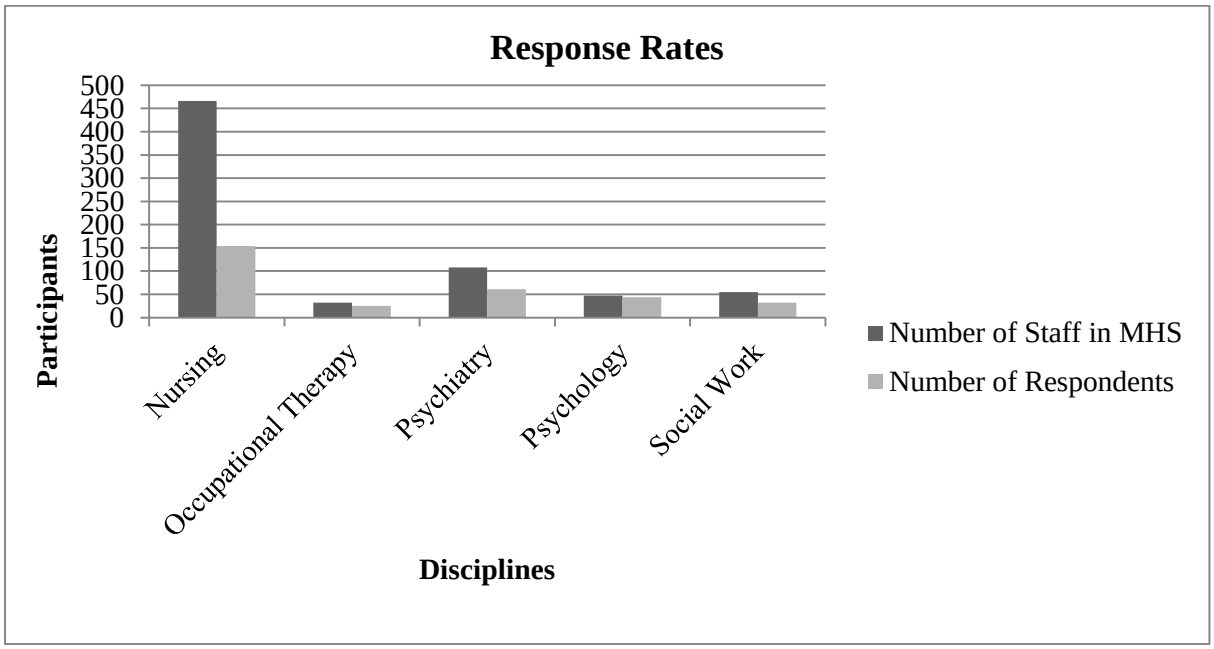


Figure 2: Response rates

Figure 3 presents data on the percentage of participants from each of the five disciplines in the mental health service.

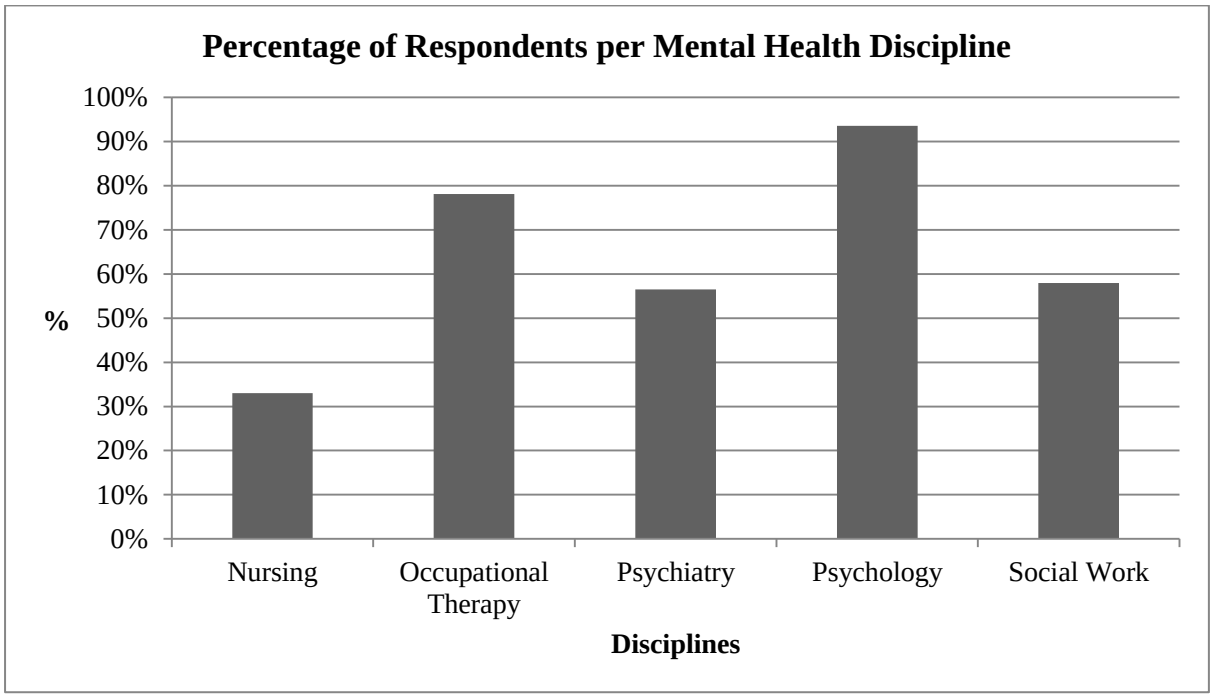


Figure 3**:** Percentages of respondents per mental health discipline

Education Level

Figure 4 presents the highest level of education achieved across all disciplines in the mental health service.

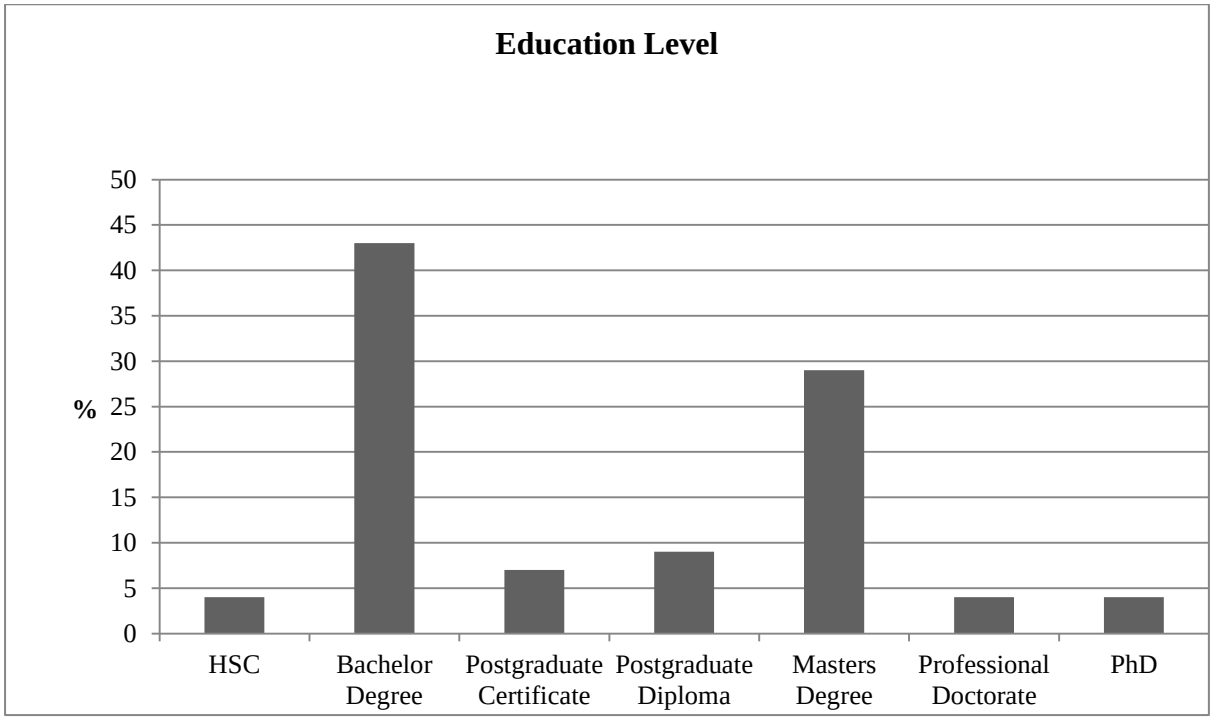


Figure 4: Education level

In terms of the overall sample (N= 316), four percent of respondents had achieved their Higher School Certificate, 43 percent had a Bachelor Degree, seven percent had a postgraduate certificate, nine percent had a postgraduate diploma, 29 percent had a Masters degree, four percent a Professional Doctorate and four percent had been awarded a PhD qualification. Participants who had selected HSC may have done so in error, or may have been transitional nurses on clinical placement.

Figure 5 presents the highest level of education achieved by each discipline.

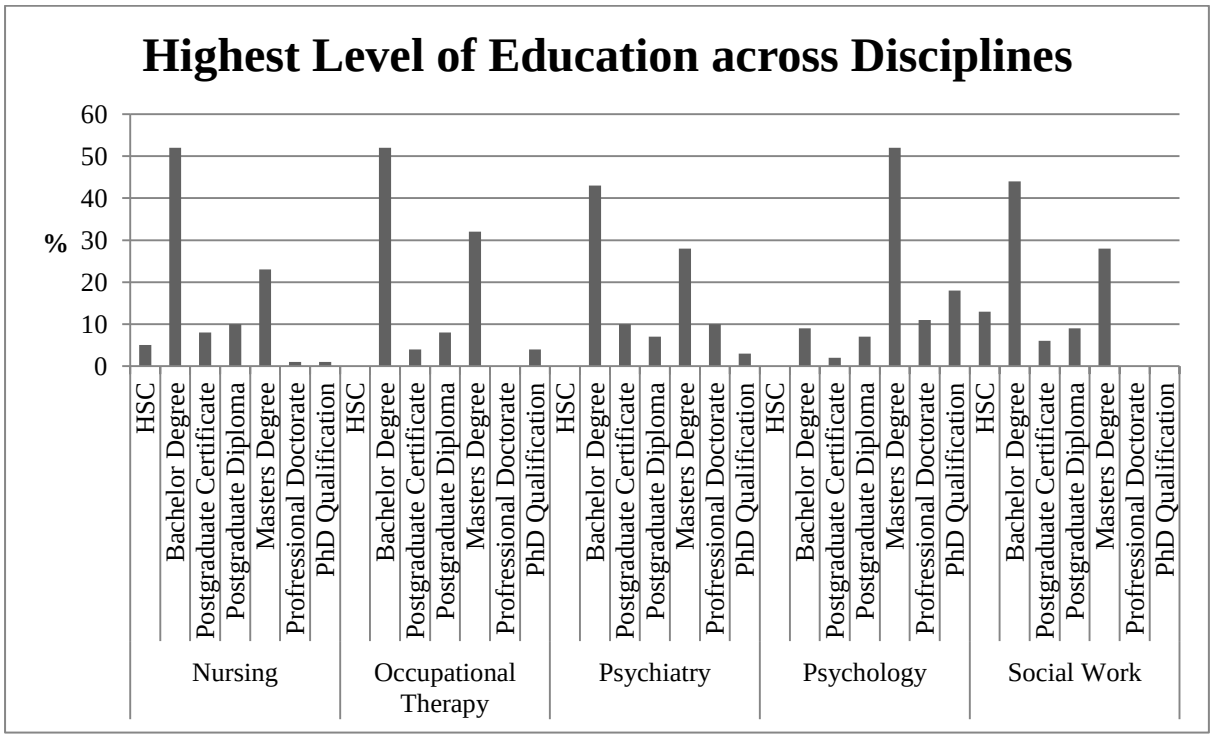


Figure 5: Highest level of education across disciplines

In Nursing (n=154), five percent of respondents had achieved their Higher School Certificate, 52 percent had a Bachelor Degree, eight percent had a postgraduate certificate, ten percent had a postgraduate diploma, 23 percent had a Masters degree, one percent a Professional Doctorate and one percent had been awarded a PhD qualification.

Of the occupational therapists (n=25), 52 percent had a Bachelor Degree, four percent had a postgraduate certificate, eight percent had a postgraduate diploma, 32 percent had a Masters degree, none had a Professional Doctorate and four percent had been awarded a PhD qualification.

In Psychiatry (n=61), 43 percent had a Bachelor Degree, ten percent had a postgraduate certificate, seven percent had a postgraduate diploma, 28 percent had a Masters degree, ten percent a Professional Doctorate and three percent had been awarded a PhD qualification.

Of the psychologists (n=44), nine percent had a Bachelor Degree, two percent had a postgraduate certificate, seven percent had a postgraduate diploma, 52 percent had a Masters

degree, eleven percent a Professional Doctorate and 18 percent had been awarded a PhD qualification.

In Social work(n=32), thirteen percent of respondents had achieved their Higher School Certificate, 44 percent had a Bachelor Degree, six percent had a postgraduate certificate, nine percent had a postgraduate diploma, 28 percent had a Masters degree, none had a Professional Doctorate or a PhD qualification. The results here may be because some respondents ticked all educational achievements rather than the highest level of educational achievement.

Of all the disciplines, psychiatry and psychology tend to spend the most amount of time at university and are most likely to hold postgraduate qualifications at Professional Doctorate or PhD level.

Age

Figure 6 presents the age of respondents.

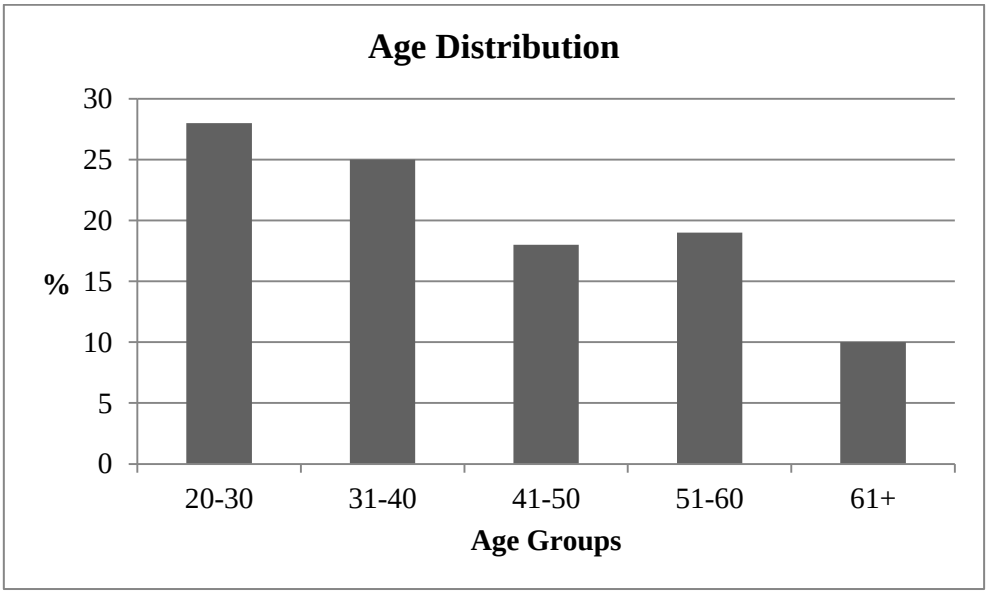


Figure 6: Age distribution

In terms of the overall sample (N=316), 28 percent of respondents were aged between 20-30, 25 percent were between 31-40, 18 percent between 41-50, 19 percent between 51-60 and 10 percent 61-70+.

Figure 7 shows the age distribution of respondents from each discipline.

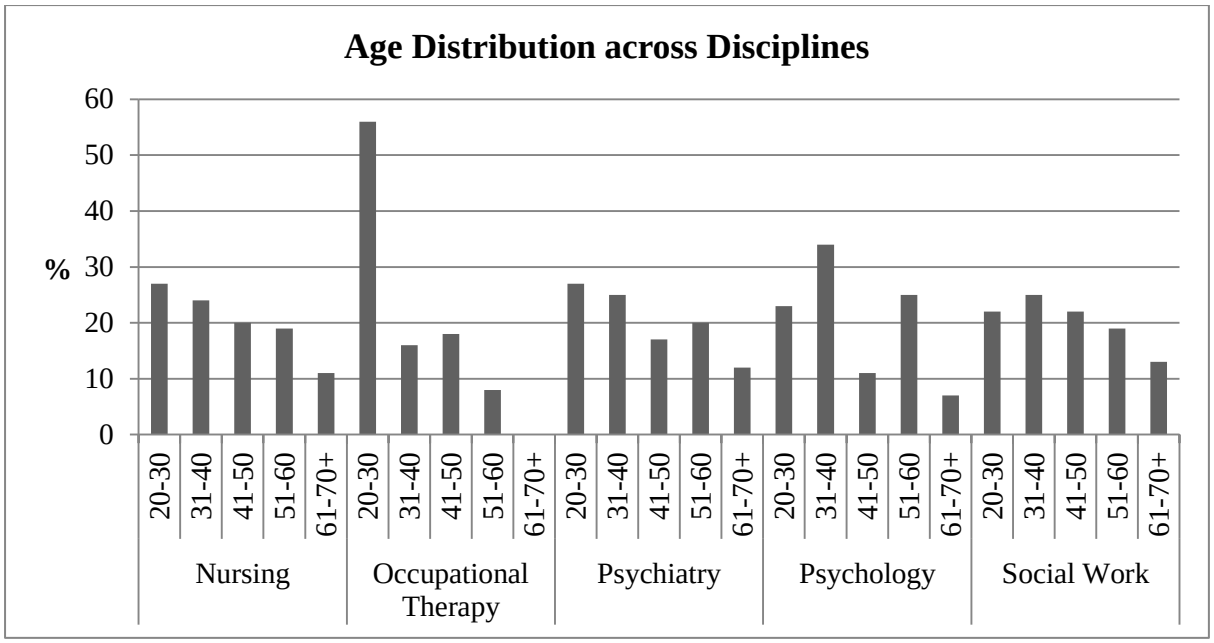


Figure 7: Age distribution across disciplines

In terms of nursing (n= 154), 27 percent of respondents were aged between 20-30, 24 percent were between 31-40, 20 percent between 41-50, 19 percent between 51-60 and 11 percent 61-70+.

In terms of occupational therapy (n=25), 56 percent of respondents were aged between 20-30, 16 percent were between 31-40, 18 percent between 41-50, eight percent between 51-60 and zero percent 61-70+.

In terms of psychiatry (n= 61), 27 percent of respondents were aged between 20-30, 25 percent were between 31-40, 17 percent between 41-50, 20 percent between 51-60 and 12 percent 61-70+.

In terms of psychology (n= 44), 23 percent of respondents were aged between 20-30, 34 percent were between 31-40, 11 percent between 41-50, 25 percent between 51-60 and 7 percent 61-70+.

In terms of social work (n=32), 22 percent of respondents were aged between 20-30, 25 percent were between 31-40, 22 percent between 41-50, 19 percent between 51-60 and 13 percent 61-70+.

Of note, the occupational therapy workforce tended to have the highest representation in the 20-30 year age category. The reason for this significant difference was not pursued in this study. However, it was an interesting finding.

Gender

Figure 8 presents the gender of respondents.

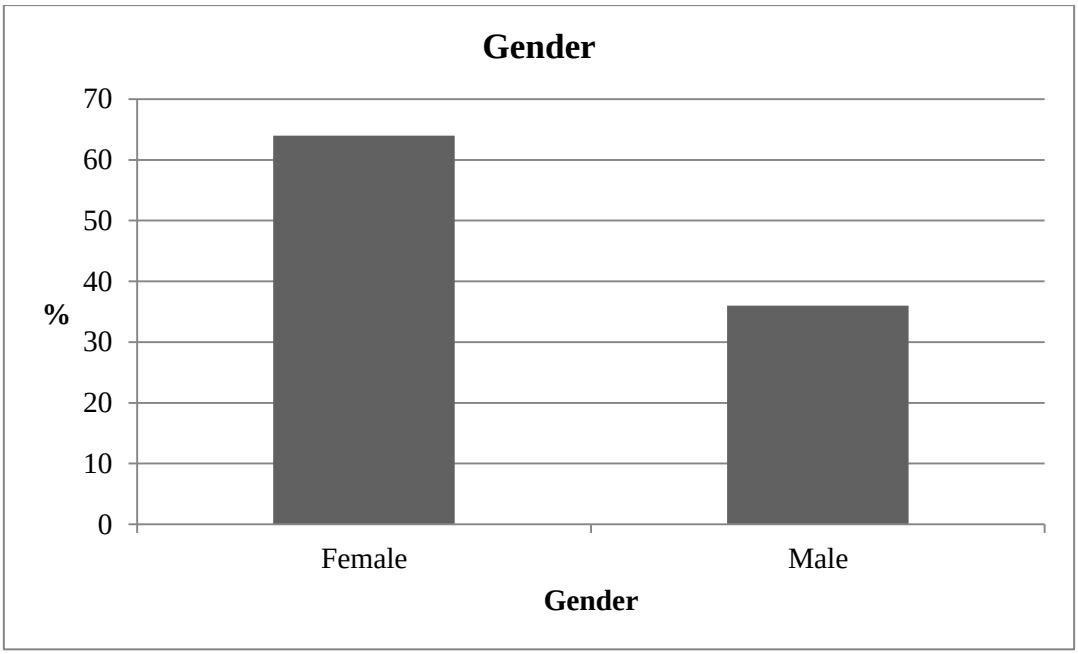


Figure 8: Gender

In terms of gender of the overall sample (N=316), 64 percent of respondents were female and 36 percent were male (See Figure 8). The difference in gender was not surprising given that nursing, occupational therapy, psychology and social work tend to be predominantly female dominated disciplines (Davies 1995). Figure 9 presents the gender distribution of each discipline.

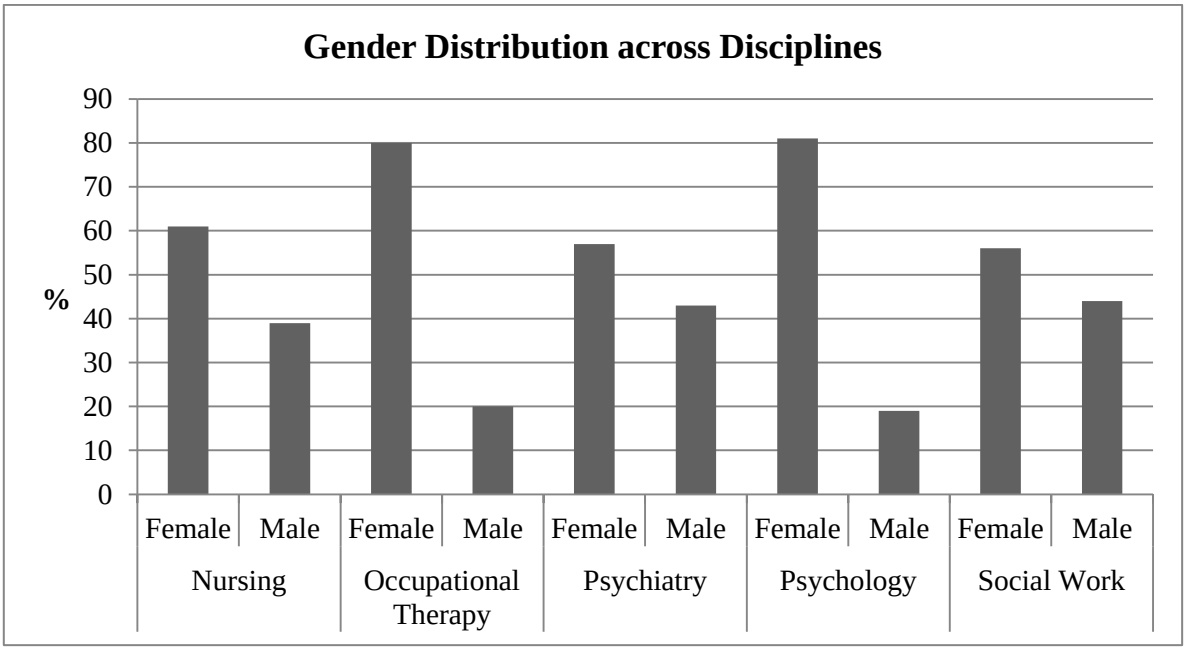


Figure 9: Gender distribution across disciplines

In terms of nursing (n=154), 61 percent of respondents were female and 39 % were male.

In terms of occupational therapy (n=25), 80 percent of respondents were female and 20 % were male.

In terms of psychiatry (n=61), 57 percent of respondents were female and 43 % were male.

In terms of psychology (n=44), 81 percent of respondents were female and 19% were male.

In terms of social work (n=32), 56 percent of respondents were female and 44 % were male.

Of note, occupational therapy and psychology tended to have the highest proportion of female staff. This may be an artefact of hiring procedures.

Inpatient or Community

Figure 10 presents the distribution of staff between inpatient and community work locations.

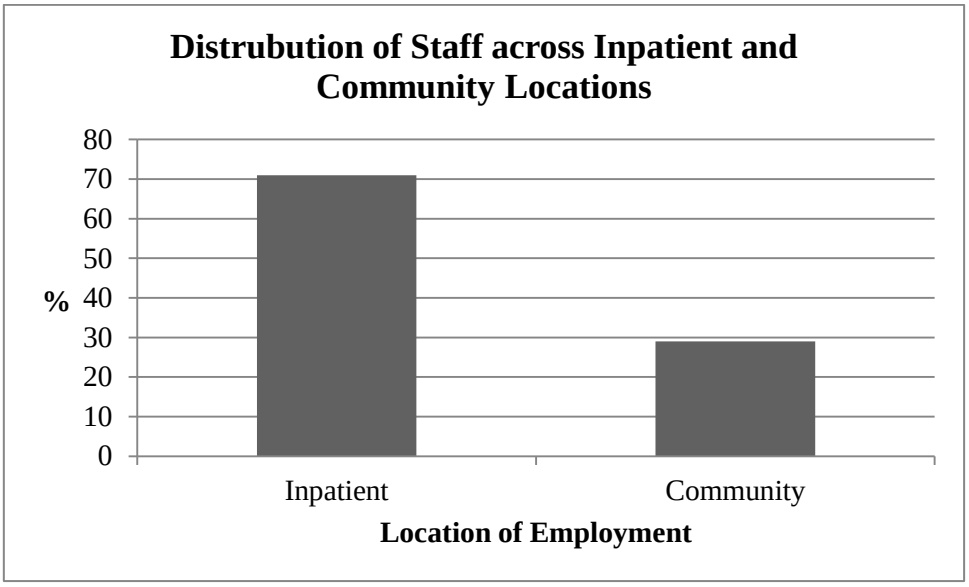


Figure 10: Distribution of staff across inpatient and community locations

In terms of the overall sample (N=316), 71 percent of respondents worked in the inpatient setting and 29 percent worked in community. The difference was statistically significant, chi-square test (p=<.0001).

Figure 11 presents the percentage of staff from each discipline employed either in inpatient or community settings.

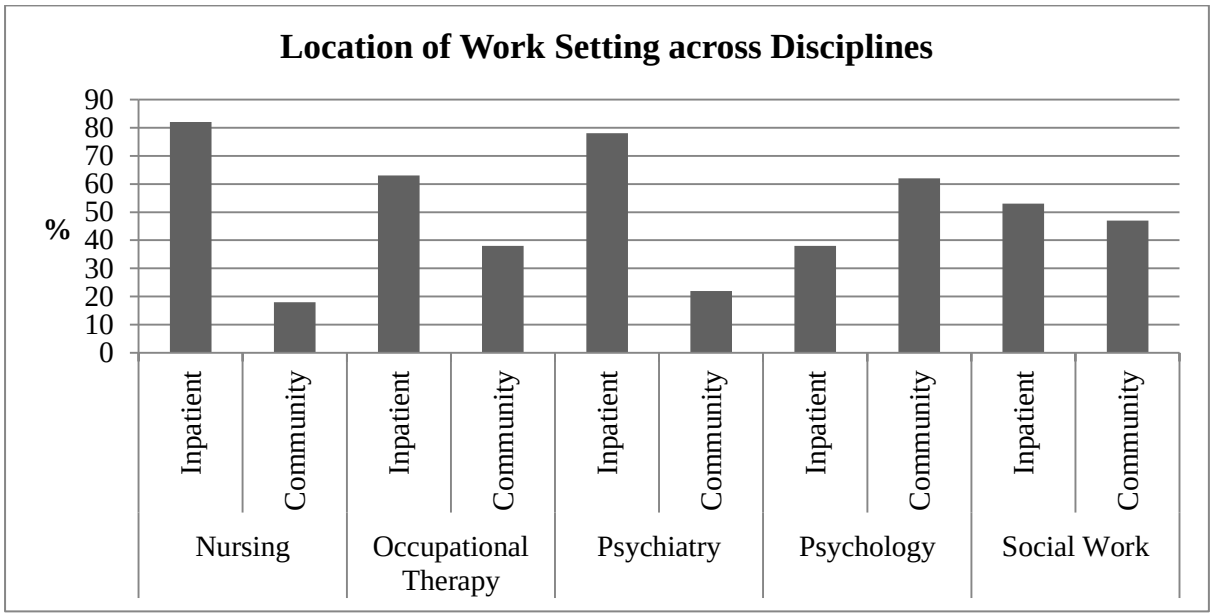


Figure 11: Location of work setting across disciplines

In terms of nursing (n=154), 82 percent of respondents worked in the inpatient setting and 18 percent worked in community.

In terms of occupational therapy (n=25), 63 percent of respondents worked in the inpatient setting and 38 percent worked in community.

In terms of psychiatry (n=61), 78 percent of respondents worked in the inpatient setting and 22 percent worked in community.

In terms of psychology (n=44), 38 percent of respondents worked in the inpatient setting and 62 percent worked in community.

In terms of social work (n=32), 53 percent of respondents worked in the inpatient setting and 47 percent worked in community.

Years Employed

Figure 12 shows how long respondents had been working professionally.

Figure 12: Total years of employment

In terms of the overall sample (N= 316), two percent of respondents had been employed for less than 1 year, 48 percent 1-5 years, 20 percent 6-10 years, 10 percent 11-15 years, eight percent 16-20 years, five percent 21-25 years and seven percent 26+ years.

Figure 13 presents the number of years employed for each discipline.

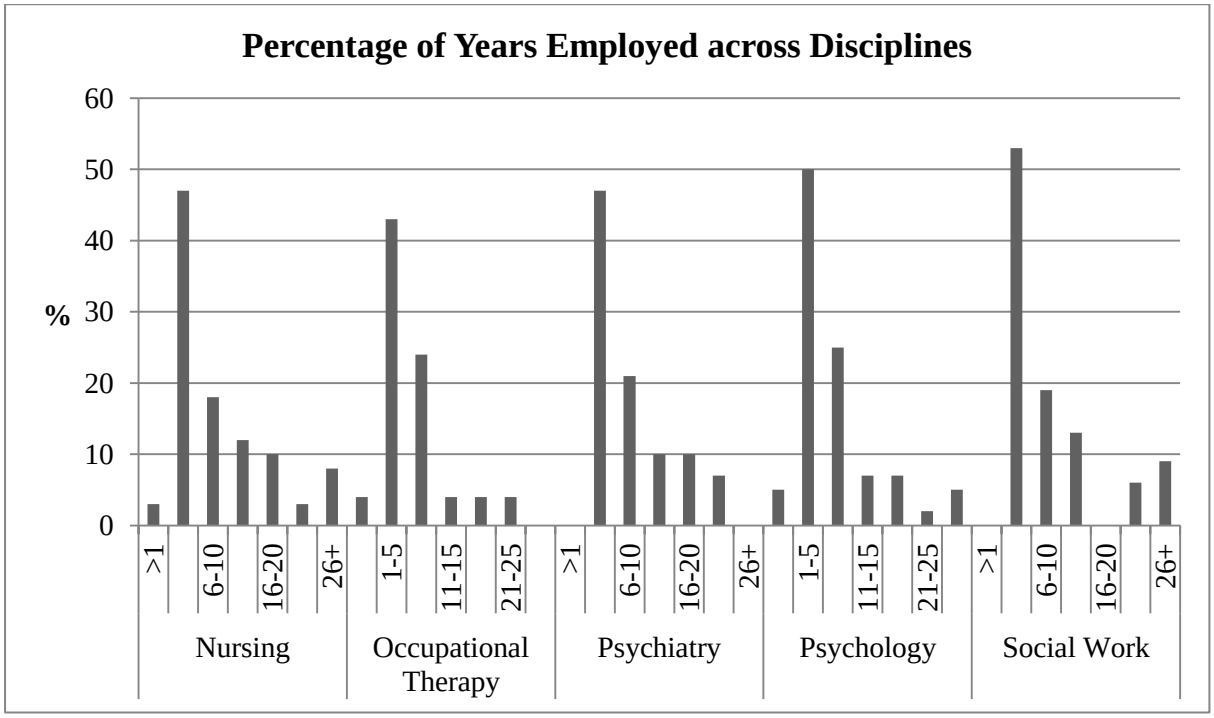


Figure 13: Percentage of years employed across disciplines

In terms of nursing (n=154), three percent of respondents had been employed for less than 1 year, 47 percent 1-5 years, 18 percent 6-10 years, 12 percent 11-15 years,10 percent 16-20 years, three percent 21-25 years and eight percent 26+ years.

In terms of occupational therapy (n=25), four percent of respondents had been employed for less than 1 year, 43 percent 1-5 years, 24 percent 6-10 years, four percent 11-15 years, four percent 16-20 years, four percent 21-25 years and zero percent 26+ years.

In terms of psychiatry (n= 61), zero percent of respondents had been employed for less than 1 year, 47 percent 1-5 years, 21 percent 6-10 years, 10 percent 11-15 years, 10 percent 16-20 years, seven percent 21-25 years and zero percent 26+ years.

In terms of psychology (n=44), five percent of respondents had been employed for less than 1 year, 50 percent 1-5 years, 25 percent 6-10 years, seven percent 11-15 years, seven percent 16-20 years, two percent 21-25 years and five percent 26+ years.

In terms of social work (n=32), zero percent of respondents had been employed for less than 1 year, 53 percent 1-5 years, 19 percent 6-10 years, 13 percent 11-15 years, zero percent 16-20 years, six percent 21-25 years and nine percent 26+ years.

Experience in Mental Health

The years of experience in mental health of all respondents is shown in Figure 14.

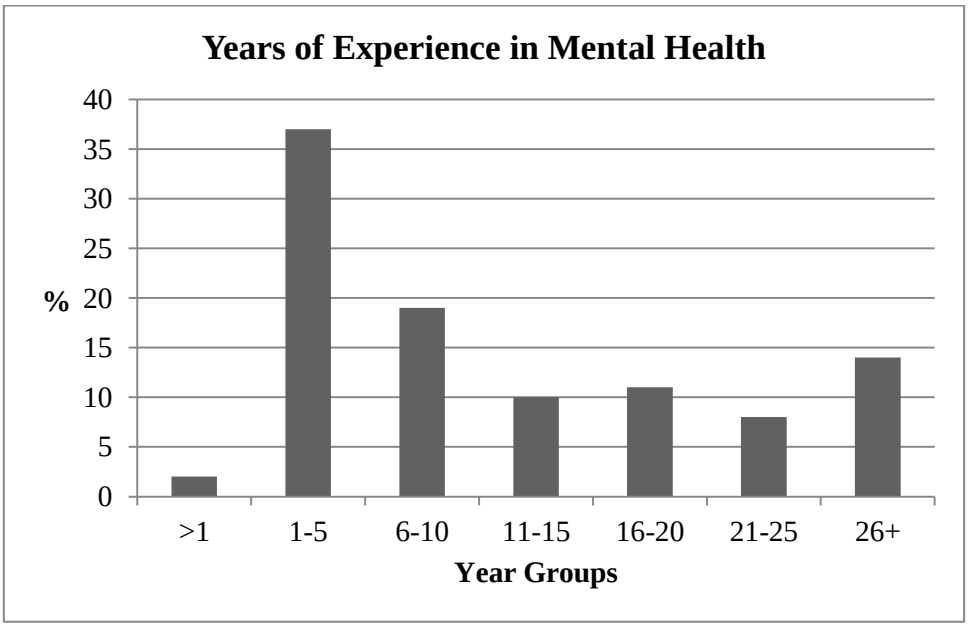


Figure 14: Years of experience in mental health

In terms of the overall sample (N=316), two percent of respondents had specific mental health experience for less than 1 year, 37 percent 1-5 years, 19 percent 6-10 years, 10 percent 11-15 years, 11 percent 16-20 years , eight percent 21-25 years and 14 percent 26+ years.

The years of experience in mental health of each discipline is shown in Table 15.

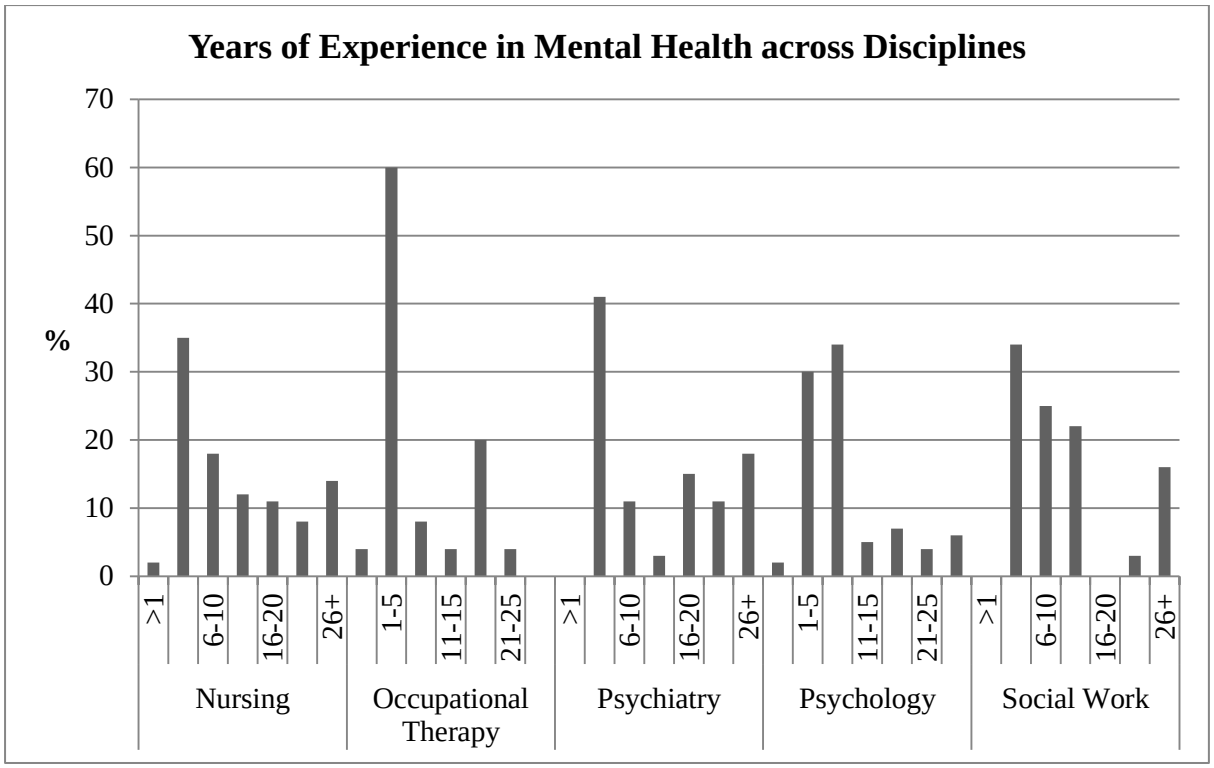


Figure 15: Years of experience in mental health across disciplines

In terms of nursing (n=154), two percent of respondents had specific mental health experience for less than 1 year, 35 percent 1-5 years, 18 percent 6-10 years, 12 percent 11-15 years, 11 percent 16-20 years , eight percent 21-25 years and 14 percent 26+ years.

In terms of occupational therapy (n=25), four percent of respondents had specific mental health experience for less than 1 year, 60 percent 1-5 years, eight percent 6-10 years, four percent 11-15 years, 20 percent 16-20 years , four percent 21-25 years and zero percent 26+ years.

In terms of psychiatry (n= 61), no respondents had specific mental health experience for less than 1 year, 41 percent 1-5 years, 11 percent 6-10 years, three percent 11-15 years, 15 percent 16-20 years , 11percent 21-25 years and 18 percent 26+ years.

In terms of psychology (n=44), two percent of respondents had specific mental health experience for less than 1 year, 30 percent 1-5 years, 34 percent 6-10 years, five percent 11-15 years, seven percent 16-20 years , four percent 21-25 years and six percent 26+ years.

In terms of social work (n=32), no respondents had specific mental health experience for less than 1 year, 34 percent 1-5 years, 25 percent 6-10 years, 22 percent 11-15 years, zero percent 16-20 years , three percent 21-25 years and 16 percent 26+ .

Summary

Three hundred and twenty respondents participated in the study. The response rate was 44.5 percent. Forty nine percent of respondents were nurses, 7.9 percent occupational therapists, 19.3 percent psychiatrists, 13.9 percent psychologists and 10.1 percent social workers. About 57 percent of respondents had post-graduate qualifications in addition to a Bachelor's degree. Over seventy percent of respondents were under the age of 50 years. Sixty five percent of respondents were female and 35 percent were male. About 71 percent of respondents were located on inpatient units and 29 percent on community teams. Seventy percent of respondents had been employed less than 10 years. About 55 percent of respondents had less than 10 years specific mental health experience and 45 percent of respondents had over 10 years of mental health experience.

Appendix 27 Quantitative Results

The quantitative analyses to the research sub-questions from Chapter 5 are presented in this appendix. Summaries of these results are in Tables 5.13, 5.31, 5.33, 5.34 and 5.35 in Chapter 5.

Sub-question 1.2 Activities

How Much Time is Spent by Each Discipline on Performing these Activities?

Table 1 provides a comparison of the amount of time each discipline spends performing discipline specific and generic activities.

A Type 3 test, a regression analysis was performed with Discipline as the independent categorical variable and time spent in either DSA or GA as the dependent variable. A Type 3 test is used when at least one of the variables is a categorical variable (Weiss & Weiss 2012).

A Type 3 test was performed to test significance between mean values of DSA for each discipline across all work settings.

H_0 = The mean DSA for all disciplines is the same.

H_1 = The mean DSA for all disciplines is not the same.

Since the P-value (0.035) is less than the significance level (0.05), the null hypothesis can be rejected. Thus, it can be concluded there is at least one statistically significant difference in average time spent on discipline specific activity between disciplines in the mental health service. Psychiatrists spent the most amount of time on discipline specific activities.

A Type 3 test was performed to test significance between mean values of GA for each discipline across all work settings.

H_0 = The mean GA for all disciplines is the same.

H_1 = The mean GA for all disciplines is not the same.

Since the P-value (0.001) is less than the significance level (0.05), the null hypothesis can be rejected. Thus, it can be concluded there is at least one statistically significant difference in average time spent on generic activity between disciplines in the mental health service. Psychiatrists spent the least amount of time on generic activities.

There was a significant difference in time spent performing discipline specific activities between disciplines. Psychiatrists spent the most time performing discipline specific activities and the least time performing generic activities.

Table 1: Time spent in activity – full sample

		Disciplines						
Category	**Statistic**	**Nursing (n=154)**	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**All (N=316)**	**P-value**
Discipline Specific Activity	Mean	45.78	46.20	58.69	53.07	47.19	49.46	**0.035***
	SD	28.36	22.51	28.60	28.53	29.43	28.42	
Generic Activity	Mean	36.82	49.80	26.56	38.72	40.31	36.48	**0.001***
	SD	25.29	22.84	18.31	25.57	27.89	24.80	

Table 2 compares the amount of time each discipline spends performing discipline specific and generic activities on inpatient units.

A Type 3 test was performed to test significance between mean values of DSA for each discipline on inpatient units.

H_0 = The mean DSA for all disciplines is the same on inpatient units.

H_1 = The mean DSA for all disciplines is not the same on inpatient units.

Since the P-value (0.041) is less than the significance level (0.05), the null hypothesis can be rejected. Thus, it can be concluded there is at least one statistically significant difference in average time spent on discipline specific activity between disciplines in the mental health service. Social workers spent the most time performing discipline specific activities on inpatient units.

A Type 3 test was performed to test significance between mean values of GA for each discipline on inpatient units.

H_0 = The mean GA for all disciplines is the same on inpatient units.

H_1 = The mean GA for all disciplines is not the same inpatient units.

Since the P-value (0.068) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Even though psychologists reported spending the least amount of time on generic activities on inpatient units, there was no statistically significant difference between disciplines for time they spent performing generic activities on inpatient units.

There was a significant difference between disciplines on inpatient units in time spent performing discipline specific activities. Social workers spent most time performing discipline specific activities. There was no significant difference between disciplines on inpatient units in time spent performing generic activities.

Table 2: Time spent in activity- inpatient

		Disciplines						
Category	**Statistic**	**Nursing (n=120)**	**Occupational Therapy (n=15)**	**Psychiatry (n=47)**	**Psychology (n=16)**	**Social Work (n=17)**	**All (n=215)**	**P-value**
Discipline Specific Activity	Mean	45.00	50.88	58.00	59.13	71.56	55.51	**0.041***
	SD	28.30	27.50	9.96	28.51	19.30	26.65	
Generic Activity	Mean	55.00	33.46	42.00	25.96	28.44	32.08	**0.068**
	SD	26.20	21.70	9.96	17.528	19.30	20.31	

Table 3 compares the amount of time each discipline spends performing discipline specific and generic activities on community teams.

A Type 3 test was performed to test significance between mean values of DSA for each discipline on community teams.

H_0 = The mean DSA for all disciplines is the same on community teams.

H_1 = The mean DSA for all disciplines is not the same on community teams.

Since the P-value (0.003) is less than the significance level (0.05), the null hypothesis can be rejected. Thus, it can be concluded there is at least one statistically significant difference in average time spent on discipline specific activity between disciplines in the mental health service. Nurses spent the most amount of time performing discipline specific activities on community teams.

A Type 3 test was performed to test significance between mean values of GA for each discipline on community teams.

H_0 = The mean GA for all disciplines is the same on community teams.

H_1 = The mean GA for all disciplines is not the same on community teams.

Since the P-value (0.102) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Despite psychiatrists reporting they spent the most time performing generic activities, there is no statistically significant difference between the average time spent by each discipline performing generic activities on community teams.

There was a significant difference between disciplines on community teams in time spent performing discipline specific activities. Nurses spent most time performing discipline specific activities. There was no significant difference between disciplines on community teams in time spent performing generic activities.

Table 3: Time spent in activity- community

		Disciplines						
Category	**Statistic**	**Nursing (n=26)**	**Occupational Therapy (n=9)**	**Psychiatry (n=13)**	**Psychology (n=26)**	**Social Work (n=15)**	**All (n=89)**	**P-value**
Discipline Specific Activity	Mean	70.00	25.38	29.44	59.23	43.08	37.22	**0.003***
	SD	18.63	21.77	26.15	30.06	27.02	27.77	
Generic Activity	Mean	30.00	51.54	59.44	25.38	45.38	46.11	**0.102**
	SD	25.76	33.19	32.54	18.42	27.53	30.35	

Table 4 compares the average amount of time spent by all respondents on discipline specific and generic activity in inpatient and community work locations.

Table 4: Time spent across activities

		Work Location				
Category	**Statistic**	**Inpatient (n=216)**	**Community (n=90)**	**All (N=306)**	**Test**	**P-value**
Discipline Specific Activity	Mean	55.51	37.22	50.13	Type 3	**<.0001***
	SD	26.65	27.74	28.20		
Generic Activity	Mean	32.08	46.11	36.21	Type 3	**<.0001***
	SD	20.31	30.35	24.51		
DSA - GA	Mean	23.43	-8.89	13.92	Type 3	**<.0001***
	SD	33.81	44.51	40.02		

A Type 3 test was performed to test significance between mean values of DSA for respondents across work locations.

H_0 = The mean DSA is the same in all work settings.

H_1 = The mean DSA is not the same in all work settings.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The results show a significant difference between the average time spent by staff on discipline specific activity on inpatient units and community teams. Staff on inpatient units spent more time engaged in performing discipline specific activities.

A Type 3 test was performed to test significance between mean values of GA for respondents across work locations.

H_0 = The mean GA is the same in all work settings.

H_1 = The mean GA is not the same in all work settings.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The results show a significant difference between the average time spent by staff on generic activity on inpatient units and community teams. Staff on community teams spent more time engaged in performing generic activities.

A Type 3 test was performed to test significance between mean values of DSA- GA for respondents across work locations.

H_0 = The mean DSA-GA is the same in all work settings.

H_1 = The mean DSA- GA is not the same in all work settings

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The results show a significant difference between the difference in time spent

performing discipline specific and generic activities by respondents. The difference in time spent on discipline specific activity and generic activity was greatest on inpatient units. Staff on inpatient units spent on average 23.43% more time performing discipline specific activities.

Staff on inpatient units spent 23% more time performing discipline specific activities than staff on community teams.

Table 5 compares the average amount of time nurses spent performing discipline specific and generic activities.

Table 5: Difference between discipline-specific and generic activity for nursing

Variable	Statistic/Level	n=154	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	45.78	45.78 (41.31, 50.24)	
	SD	28.36		
Generic Activity	Mean	36.82	36.82 (32.84, 40.8)	
	SD	25.29		
DSA minus GA	Mean	8.96	8.96 (3.02, 14.91)	**0.0031***
	SD	37.77		

A paired samples t-test was performed to test for the difference in means. The paired sample t-test, also known as a dependent sample t-test, is used to determine whether the mean difference between two sets of observations is zero.

H_0= The mean difference between DSA and GA for nurses is zero.

H_1= The mean difference between DSA and GA for nurses is not zero.

Since the P-value (0.0031) is less than the significance level (0.05), the null hypothesis can be rejected The difference between the time nurses spent engaged in discipline specific activity (45.78%) compared with time spent engaged in generic activity (36.82%) was statistically significant, p=0.0031.

Across the mental health service, nurses spent significantly more time performing discipline specific activities.

Table 6 compares the average amount of time nurses spent performing discipline specific and generic activities on inpatient units

Table 6: Difference between discipline-specific and generic activity for nursing- inpatient

Variable	Statistic/Level	n=120	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	45.00	45.00 (33.00,57.00)	**<.0001**
	SD	28.30		
Generic Activity	Mean	55.00	55.00 (39.21, 70.79)	**<.0001**
	SD	26.20		
DSA minus GA	Mean	-10.00	-10.00 (118.09, 2.09)	**0.0791**
	SD	33.217		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for nurses on inpatient units is zero.

H_1= The mean difference between DSA and GA for nurses on inpatient units is not zero.

Since the P-value (<0.0791) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The difference between the time nurses spent engaged in discipline specific activity (45.00%) compared with time spent engaged in generic activity (55.00%) on inpatient units was not statistically significant, p =0.0791.

On inpatient teams, while nurses spent more time performing generic activities than discipline specific activities, the difference was not statistically significant.

Table 7 compares the average amount of time nurses spent performing discipline specific and generic activities on community teams.

Table 7: Difference between discipline-specific and generic activity for nursing – community

Variable	Statistic/Level	n=26	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	70.00	70.00 (57.8, 82.14)	**<.0001**
	SD	18.630		
Generic Activity	Mean	30.00	30.00 (20.76, 40.54)	**<.0001**
	SD	25.76		
DSA minus GA	Mean	40.00	40.00 (22.31, 58.33)	**<.0023***
	SD	40.138		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for nurses on community teams is zero.

H_1= The mean difference between DSA and GA for nurses on community teams is not zero.

Since the P-value (0.0023) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time nurses spent engaged in discipline specific activity (70.00%) compared with time spent engaged in generic activity (30.00%) on community teams was statistically significant, p =0.0023.

On community teams, nurses spent significantly more time performing discipline specific activities than generic activities.

Table 8 compares the average amount of time occupational therapists spent performing discipline specific and generic activities.

Table 8: Difference between discipline-specific and generic activity for occupational therapy

Variable	Statistic/Level	n=25	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	46.20	46.2 (37.55, 54.85)	
	SD	22.513		
Generic Activity	Mean	49.80	49.8 (41.03, 58.57)	
	SD	22.844		
DSA minus GA	Mean	-3.60	-3.6 (-19.24, 12.04)	**0.6518**
	SD	40.710		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for occupational therapists is zero.

H_1= The mean difference between DSA and GA for occupational therapists is not zero.

Since the P-value (0.652) is more than the significance level (0.05), the null hypothesis cannot be rejected. The difference between the time occupational therapists spent engaged in discipline specific activity (46.20%) compared with time spent engaged in generic activity (49.80%) was not statistically significant, p=0.6518.

Across the mental health, service occupational therapists spent the same amount of time performing discipline specific and generic activities.

Table 9 compares the average amount of time occupational therapists spent performing discipline specific and generic activities on inpatient units.

Table 9: Difference between discipline-specific and generic activity for occupational therapy – inpatient

Variable	Statistic/Level	n=15	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	50.88	50.88 (45.98, 55.77)	**<.0001**
	SD	27.498		
Generic Activity	Mean	33.46	33.46 (29.59, 37.32)	**<.0001**
	SD	21.701		
DSA minus GA	Mean	17.42	17.42 (11.5, 23.33)	**0.0001***
	SD	33.217		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for occupational therapists on inpatient units is zero.

H_1= The mean difference between DSA and GA for occupational therapists on inpatient units is not zero.

Since the P-value (0.001) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time occupational therapists spent engaged in discipline specific activity (50.88%) compared with time spent engaged in generic activity (33.46%) on inpatient units was statistically significant, p=0.0001.

On inpatient units, occupational therapists spent significantly more time performing discipline specific activities than generic activities.

Table 10 compares the average amount of time occupational therapists spent performing discipline specific and generic activities on community teams.

Table 10: Difference between discipline-specific and generic activity for occupational therapy – community

Variable	Statistic/Level	n=10	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	25.38	25.38 (17.18, 33.59)	**<.0001**
	SD	21.768		
Generic Activity	Mean	51.54	51.54 (39.03, 64.05)	**<.0001**
	SD	33.189		
DSA minus GA	Mean	-26.15	-26.15 (-39.77, -12.54)	**0.0002***
	SD	36.119		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for occupational therapists on community teams is zero.

H_1= The mean difference between DSA and GA for occupational therapists on community teams is not zero.

Since the P-value (0.0002) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time occupational therapists spent engaged in discipline specific activity (25.38%) compared with time spent engaged in generic activity (51.54%) on community teams was statistically significant, p=0.0002.

On community teams, occupational therapists spent significantly more time performing generic activities than discipline specific activities.

Table 11 compares the average amount of time psychiatrists spent performing discipline specific and generic activities.

Table 11: Difference between discipline-specific and generic activity for psychiatry

Variable	Statistic/Level	n=61	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	58.69	58.69 (51.57, 65.8)	
	SD	28.591		
Generic Activity	Mean	26.56	26.56 (22, 31.12)	
	SD	18.315		
DSA minus GA	Mean	32.13	32.13 (24.16, 40.11)	**<.0001***
	SD	32.048		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychiatrists is zero.

H_1= The mean difference between DSA and GA for psychiatrists is not zero.

Since the P-value (<0001) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychiatrists spent engaged in discipline specific activity (58.69%) compared with time spent engaged in generic activity (26.56%) was statistically significant, p=<.0001.

Across the mental health, service psychiatrists spent significantly more time performing discipline specific activities.

Table 12 compares the average amount of time psychiatrists spent performing discipline specific and generic activities on inpatient units.

Table 12: Difference between discipline-specific and generic activity for psychiatry – inpatient

Variable	Statistic/Level	n=47	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	58.00	58 (53.13, 62.87)	**<.0001**
	SD	9.964		
Generic Activity	Mean	42.00	42 (37.13, 46.87)	**<.0001**
	SD	9.964		
DSA minus GA	Mean	16.00	16 (6.26, 25.74)	**0.0013***
	SD	19.928		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychiatrists on inpatient units is zero.

H_1= The mean difference between DSA and GA for psychiatrists on inpatient units is not zero.

Since the P-value (0.0013) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychiatrists spent engaged in discipline specific activity (58.00%) compared with time spent engaged in generic activity (42.00%) on inpatient units was statistically significant, p=0.0013.

On inpatient units, psychiatrists spent significantly more time performing discipline specific activities than generic activities.

Table 13 compares the average amount of time psychiatrists spent performing discipline specific and generic activities on community teams.

Table 13: Difference between discipline-specific and generic activity for psychiatry – community

Variable	Statistic/Level	n=13	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	29.44	29.44 (13.33, 45.55)	**0.0003**
	SD	26.154		
Generic Activity	Mean	59.44	59.44 (39.4, 79.49)	**<.0001**
	SD	32.543		
DSA minus GA	Mean	-30.00	-30 (-60.02, 0.02)	**0.0501***
	SD	48.734		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychiatrists on community teams is zero.

H_1= The mean difference between DSA and GA for psychiatrists on community teams is not zero.

Since the P-value (0.0501) is the same as the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychiatrists spent engaged in discipline specific activity (59.23%) compared with time spent engaged in generic activity (25.38%) on community teams was statistically significant, p=<.0001.

On community teams, psychiatrists spent significantly more time performing generic activities than discipline specific activities.

Table 14 compares the average amount of time psychologists spent performing discipline specific and generic activities.

Table 14: Difference between discipline-specific and generic activity for psychology

Variable	Statistic/Level	n=44	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	53.07	53.07 (44.73, 61.4)	
	SD	28.534		
Generic Activity	Mean	38.72	38.72 (31.17, 46.27)	
	SD	25.567		
DSA minus GA	Mean	15.58	15.58 (1.81, 29.35)	**0.0266***
	SD	46.614		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychologists is zero.

H_1= The mean difference between DSA and GA for psychologists is not zero.

Since the P-value (0.026) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychologists spent engaged in discipline specific activity (53.07%) compared with time spent engaged in generic activity (38.72%) was statistically significant, p=0.0266.

Across the mental health service, psychologists spent significantly more time performing discipline specific activities.

Table 15 compares the average amount of time psychologists spent performing discipline specific and generic activities on inpatient units**.**

Table 15: Difference between discipline-specific and generic activity for psychology – inpatient

Variable	**Statistic/Level**	**n=16**	**Value (95% CI)**	**P-Value**
Discipline-Specific Activity	Mean	59.15	59.15 (51.09, 67.21)	**<.0001**
	SD	28.501		
Generic Activity	Mean	25.96	25.96 (21, 30.91)	**<.0001**
	SD	17.528		
DSA minus GA	Mean	33.19	33.19 (24.5, 41.88)	**<.0001***
	SD	30.724		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychologists on inpatient units is zero.

H_1= The mean difference between DSA and GA for psychologists on inpatient units is not zero.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychologists spent engaged in discipline specific activity (59.15%) compared with time spent engaged in generic activity (25.96%) on inpatient units was statistically significant, p=<.0001.

On inpatient units, psychologists spent significantly more time performing discipline specific activities than generic activities.

Table 16 compares the average amount of time psychologists spent performing discipline specific and generic activities on community teams.

Table 16: Difference between discipline-specific and generic activity for psychology – community

Variable	Statistic/Level	n=26	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	59.23	59.23 (43.53, 74.93)	**<.0001**
	SD	30.059		
Generic Activity	Mean	25.38	25.38 (15.76, 35.01)	**<.0001**
	SD	18.423		
DSA minus GA	Mean	33.85	33.85 (16.72, 50.98)	**0.0001***
	SD	32.797		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for psychologists on community teams is zero.

H_1= The mean difference between DSA and GA for psychologists on community teams is not zero.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time psychologists spent engaged in discipline specific activity (59.23%) compared with time spent engaged in generic activity (25.38%) on community teams was statistically significant, p=<.0001.

On community teams, psychologists spent significantly more time performing discipline specific activities than generic activities.

Table 17 compares the average amount of time social workers spent performing discipline specific and generic activities.

Table 17: Difference between discipline-specific and generic activity for social work

Variable	Statistic/Level	n=32	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	47.19	47.19 (37.15, 57.22)	
	SD	29.428		
Generic Activity	Mean	40.31	40.31 (30.8, 49.82)	
	SD	27.880		
DSA minus GA	Mean	6.88	6.88 (-8.97, 22.72)	**0.3950**
	SD	46.451		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for social workers is zero.

H_1= The mean difference between DSA and GA for social workers is not zero.

Since the P-value (0.395) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The difference between the time social workers spent engaged in discipline specific activity (47.19%) compared with time spent engaged in generic activity (40.31%) was not statistically significant, p=0.3950.

Across the mental health, service social workers spent the same amount of time performing discipline specific and generic activities.

Table 18 compares the average amount of time social workers spent performing discipline specific and generic activities on inpatient units.

Table 18: Difference between discipline-specific and generic activity for social work – inpatient

Variable	**Statistic/Level**	**n=17**	**Value (95% CI)**	**P-Value**
Discipline-Specific Activity	Mean	71.56	71.56 (62.41, 80.72)	**<.0001**
	SD	19.298		
Generic Activity	Mean	28.44	28.44 (19.28, 37.59)	**<.0001**
	SD	19.298		
DSA minus GA	Mean	43.13	43.13 (24.81, 61.44)	**<.0001***
	SD	38.595		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for social workers on inpatient units is zero.

H_1= The mean difference between DSA and GA for social workers on inpatient units is not zero.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. The difference between the time social workers spent engaged in discipline specific activity (71.56%) compared with time spent engaged in generic activity (28.44%) on inpatient units was statistically significant, p=<0001.

On inpatient units, social workers spent significantly more time performing discipline specific activities than generic activities.

Table 19 compares the average amount of time social workers spent performing discipline specific and generic activities on community teams.

Table 19: Difference between discipline-specific and generic activity for social work – community

Variable	Statistic/Level	n=15	Value (95% CI)	P-Value
Discipline-Specific Activity	Mean	43.08	43.08 (32.89, 53.26)	**<.0001**
	SD	27.021		
Generic Activity	Mean	45.38	45.38 (35.01, 55.76)	**<.0001**
	SD	27.529		
DSA minus GA	Mean	-2.31	-2.31 (-18.8, 14.18)	**0.7839**
	SD	43.755		

A paired samples t-test was performed to test for the difference in means.

H_0= The mean difference between DSA and GA for social workers on community teams is zero.

H_1= The mean difference between DSA and GA for social workers on community teams is not zero.

Since the P-value (0.7839) is greater than the significance level (0.05), the null hypothesis cannot be rejected. While there was a slight difference between the time social workers spent engaged in discipline specific activity (43.08%) compared with time spent engaged in generic activity (45.38%) on community teams it was not statistically significant, p=0.7839.

On community teams, social workers spent the same amount of time performing discipline specific and generic activities.

Sub-question 2.2 Skills

Who does each Discipline Believe should Perform these Activities?

Table 20: Top 10 discipline specific activities identified by nursing

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=154)%**	**Psychiatry (n=154)%**	**Psychology (n=154)%**	**Social Work (n=154)%**
1	Give Medication Oral and IMI (89)	Living Skills Assessment (64)	Medication Prescribing (82)	Psychological Therapy (51)	Create Repayment Schedule for Consumer (58)
2	Administer PRN Medication (86)	Outing with Consumers (46)	Medication Review (81)	DBT Group (48)	Follow-Up Housing Forms (57)
3	Supervise Consumer Bathing (84)	Assist Consumer with Shopping (46)	Pathology Requests (79)	DBT Consultation (46)	Financial Management Order Hearing (51)
4	One-to-One Nursing Care (82)	Assist Consumer Clean Room (33)	Review of Medical/Blood Results (76)	Individual Therapy (27)	Application JD, DoH, DSP (50)
5	Assist Consumer Washing Clothes (79)	Assist Consumer with legal Aid (31)	Patient Medical Assessment (62)	Psychoeducation (25)	Assist Consumer with Legal Aid (49)
6	Nurses Meeting (79)	Create Repayment Schedule for Consumer (27)	Legal Activity (MHA) Schedules (60)	Counselling (21)	Assist Consumer Clean Room (44)
7	Nursing Ward Rounds (76)	Assist Consumer Wash Clothes (27)	Psychiatry Review in Home with Registrar (56)	Phone Counselling (20)	Visit Burwood Respite (41)
8	Medication Supervision (71)	Organise Consumer Belongings (26)	ccCHIP Referral (51)	Outing with Consumers (17)	Assist Consumer with Shopping (39)
9	Supervise Meal Times (70)	Attend GP Appointment with Consumer (25)	Liaise with Pharmacy (48)	Write Support Letters (15)	Outing with Consumers (37)
10	Clozapine Clinic (58)	Supervise Consumer Bathing (24)	CTO Hearing (42)	Groups (15)	Organise Consumer Belongings (33)

Table 21: Top 10 discipline specific activities identified by occupational therapy

	Disciplines				
Activity Number	**Nursing (n=25)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=25)%**	**Psychology (n=25)%**	**Social Work (n=25)%**
1	Nurses Meeting (88)	Living Skills Assessment (88)	Medication Prescribing (88)	Psychological Therapy (84)	Follow-up Housing/Other Forms (68)
2	Give Medication Oral And IMI (84)	Groups (60)	Medication Review (80)	DBT Group (60)	Assist Consumer with Legal Aid (68)
3	One-to-One Nursing Care (84)	Assist Consumer Washing Clothes (60)	Pathology Requests (80)	Phone Counselling (49)	Financial Management Order Hearing (52)
4	Administer PRN Medication (80)	Supervise Consumer Bathing (60)	Review of Medical/Blood Results (76)	DBT Consultation (48)	Create Repayment Schedule for Consumer (52)
5	Nursing Ward Rounds (80)	Assist Consumer with Shopping (60)	Medical Patient Assessment (64)	Groups (36)	Assist Consumer Clean Room (40)
6	Medication Supervision (64)	Assist Consumer with Legal Aid (60)	Psychiatry Review in Home with Registrar (52)	Individual Therapy (24)	Writing Support Letters (40)
7	Supervise Meal times (60)	Follow-up Housing/Other Forms (56)	Administer PRN Medication (48)	Search for Consumer in Community (24)	Outing with Consumers (40)
8	Review of Medical/Blood Results (52)	Outing with Consumers (56)	Clozapine Clinic (48)	Assist Consumer with Legal Aid (20)	Home Visits (40)
9	Groups (48)	Applications to JD, DoH, DSP (48)	Give Medication Oral And IMI (48)	Writing Support Letters (20)	Visit Burwood Respite (40)
10	Outing with Consumers (48)	Create Food Diary Template (44)	Liaise with Pharmacy (48)	Care Coordination (20)	Assist Consumer with Shopping (36)

Table 22: Top 10 discipline specific activities identified by psychiatry

	Disciplines				
Activity Number	**Nursing (n=61)%**	**Occupational Therapy (n=61)%**	**Psychiatry (n=61)%**	**Psychology (n=61)%**	**Social Work (n=61)%**
1	One-to-One Nursing Care (89)	Living Skills Assessment (84)	Medication Prescribing (90)	DBT Group (61)	Assist Consumer with Legal Aid (66)
2	Give Medication Oral and IMI (89)	Outing with Consumers (56)	Medication Review (90)	DBT Consultation (56)	Follow-up Housing/Other Forms (64)
3	Administer PRN Medication (84)	Follow-up Housing/Other Forms (56)	Review Medical/Blood Results (89)	Psychological Therapy (54)	Applications JD, DoH, DSP (62)
4	Nurses Meeting (84)	Assist Consumer with shopping (51)	Pathology Requests (89)	Individual Therapy (46)	Financial Management Hearing Order (59)
5	Nursing Ward Rounds (84)	Organise Consumer Belongings (39)	Patient Medical Assessment (82)	Groups (25)	Create Repayment Schedule for Consumer (59)
6	Supervise Consumer Bathing (80)	Assist Consumer washing Clothes (39)	Legal Activity (MHA) Schedules (70)	Attend GP Appointment with Consumer (20)	Outing with Consumers (49)
7	Supervise Meal Times (77)	Assist Consumer with Legal Aid (38)	Clozapine Clinic (69)	Outing with Consumers (20)	Assist Consumer with Shopping (48)
8	Assist Consumer Washing Clothes (74)	Assist Consumer Clean Room (38)	Liaise with Pharmacy (59)	Mental State Examination (MSE)	Organise Consumer Belongings (46)
9	Medication Supervision (67)	Create Repayment Schedule for Consumer (33)	Psychiatry Review in Home with Registrar (52)	Care Coordination (18)	Assist Consumer Cleaning Room (44)
10	Liaise with Pharmacy (57)	Financial Management Order Hearing (32)	Psychological Therapy (51)	Report Writing (16)	Search for Consumer in Community (39)

Table 23: Top 10 discipline specific activities identified by psychology

	Disciplines				
Activity Number	**Nursing (n=44)%**	**Occupational Therapy (n=44)%**	**Psychiatry (n=44)%**	**Psychology (n=44)%**	**Social Work (n=44)%**
1	Give Medication Oral & IMI (91)	Living Skills Assessment (70)	Medication Review (93)	Psychological Therapy (77)	Assist Consumer with Legal Aid (75)
2	Nursing Ward Rounds (91)	Assist Consumer with Shopping (68)	Pathology Requests (93)	DBT Group (66)	Follow-up Housing/Other Forms (70)
3	One-to-One Nursing Care (91)	Outing with Consumers (57)	Review Medical/Blood Results (91)	Individual Therapy (66)	Create Repayment Schedule for Consumer (68)
4	Supervise Consumer Bathing (89)	Assist Consumer with Legal Aid (55)	Medication Prescribing (91)	DBT Consultation (66)	Attend GP Appointment with Consumer (61)
5	Nurses Meeting (89)	Attend GP Appointment with Consumer (45)	Patient Medical Assessment (84)	Counselling (39)	Organise Consumer Belongings (59)
6	Administer PRN Medication (82)	Assist Consumer Washing Clothes (39)	ccCHIP Referral Form Completion (66)	Phone Counselling (34)	Applications JD, DoH, DSP (55)
7	Assist Consumer Washing Clothes (77)	Assist Consumer Clean Room (36)	Legal Activity (MHA) Schedules (66)	Mental Health Assessment (32)	Financial Management Order Hearing (52)
8	Clozapine Clinic (75)	Create Repayment Schedule for Consumer (34)	Clozapine Clinic (55)	Mental State Examination (30)	Assist Consumer Clean Room (50)
9	Medication Supervision (66)	Supervise Consumer Bathing (27)	Liaise with Pharmacy (52)	Groups (25)	Assist Consumer with Shopping 45)
10	Supervise Meal Times (64)	Organise Consumer Belongings (27)	Complete CTO (43)	Writing Support Letters (25)	Outing with Consumers (43)

Table 24 Top 10 discipline specific activities identified by social work

	Disciplines				
Activity Number	**Nursing (n=32)%**	**Occupational Therapy (n=32)%**	**Psychiatry (n=32)%**	**Psychology (n=32)%**	**Social Work (n=32)%**
1	One-to-One Nursing Care (84)	Living Skills Assessment (69)	Medication Prescribing (88)	DBT Group (78)	Follow-up Housing/Other Forms (63)
2	Nursing Ward Rounds (84)	Assist Consumer with Shopping (65)	Pathology Requests (83)	DBT Consultation (72)	Create Repayment Schedule for Consumer (61)
3	Give Medication Oral and IMI (84)	Outing with Consumers (56)	Medication Review (81)	Psychological Therapy (66)	Applications JD, DoH, DSP (59)
4	Nurses Meeting (84)	Organise Consumer Belongings (55)	Review of Medical/Blood Results (66)	Individual Therapy (59)	Financial Management Order Hearing (59)
5	Administer PRN Medication (78)	Create Food Diary Template (53)	Patient Medical Assessment (63)	Counselling (38)	Assist Consumer with Legal Aid (59)
6	Supervise Consumer Bathing (75)	Assist Consumer Clean Room (52)	Psychiatry Review in Home with Registrar (59)	Breach CTO (35)	Organise Consumer Belongings (59)
7	Assist Consumer Washing Clothes (72)	Create Repayment Schedule for Consumer (48)	ccCHIP Referral Form Completion (57)	Phone Counselling (34)	Assist Consumer Clean Room (58)
8	Clozapine Clinic (63)	Attend GP Appointment with Consumer (48)	Legal Activity (MHA) Schedules (56)	Attend GP Appointment with Consumer (32)	Assist Consumer with Shopping (58)
9	Medication Supervision (59)	Groups (44)	Liaise with Pharmacy (51)	Mental Health Assessment (31)	DBT Group (53)
10	Supervise Meal Times (56)	Assist Consumer with Legal Aid (39)	Medication Supervision (47)	Groups (31)	Attend GP Appointment with Consumer (52)

Table 25: Top 10 nursing activities as perceived by self and others

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=32)%**
1	Give Medication Oral and IMI (89)	Nurses Meeting (88)	One-to-One Nursing Care (89)	Give Medication Oral & IMI (91)	One-to-One Nursing Care (84)
2	Administer PRN Medication (86)	Give Medication Oral And IMI (84)	Give Medication Oral and IMI (89)	Nursing Ward Rounds (91)	Nursing Ward Rounds (84)
3	Supervise Consumer Bathing (84)	One-to-One Nursing Care (84)	Administer PRN Medication (84)	One-to-One Nursing Care (91)	Give Medication Oral and IMI (84)
4	One-to-One Nursing Care (82)	Administer PRN Medication (80)	Nurses Meeting (84)	Supervise Consumer Bathing (89)	Nurses Meeting (84)
5	Assist Consumer Washing Clothes (79)	Nursing Ward Rounds (80)	Nursing Ward Rounds (84)	Nurses Meeting (89)	Administer PRN Medication (78)
6	Nurses Meeting (79)	Medication Supervision (64)	Supervise Consumer Bathing (80)	Administer PRN Medication (82)	Supervise Consumer Bathing (75)
7	Nursing Ward Rounds (76)	Supervise Meal times (60)	Supervise Meal Times (77)	Assist Consumer Washing Clothes (77)	Assist Consumer Washing Clothes (72)
8	Medication Supervision (71)	Review of Medical/Blood Results (52)	Assist Consumer Washing Clothes (74)	Clozapine Clinic (75)	Clozapine Clinic (63)
9	Supervise Meal Times (70)	Groups (48)	Medication Supervision (67)	Medication Supervision (66)	Medication Supervision (59)
10	Clozapine Clinic (58)	Outing with Consumers (48)	Liaise with Pharmacy (57)	Supervise Meal Times (64)	Supervise Meal Times (56)

Table 26: Top 10 occupational therapy activities as perceived by self and others

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=32)%**
1	Living Skills Assessment (64)	Living Skills Assessment (88)	Living Skills Assessment (84)	Living Skills Assessment (70)	Living Skills Assessment (69)
2	Outing with Consumers (46)	Groups (60)	Outing with Consumers (56)	Assist Consumer with Shopping (68)	Assist Consumer with Shopping (65)
3	Assist Consumer with Shopping (46)	Assist Consumer Washing Clothes (60)	Follow-up Housing/Other Forms (56)	Outing with Consumers (57)	Outing with Consumers (56)
4	Assist Consumer Clean Room (33)	Supervise Consumer Bathing (60)	Assist Consumer with shopping (51)	Assist Consumer with Legal Aid (55)	Organise Consumer Belongings (55)
5	Assist Consumer with legal Aid (31)	Assist Consumer with Shopping (60)	Organise Consumer Belongings (39)	Attend GP Appointment with Consumer (45)	Create Food Diary Template (53)
6	Create Repayment Schedule for Consumer (27)	Assist Consumer with Legal Aid (60)	Assist Consumer washing Clothes (39)	Assist Consumer Washing Clothes (39)	Assist Consumer Clean Room (52)
7	Assist Consumer Wash Clothes (27)	Follow-up Housing/Other Forms (56)	Assist Consumer with Legal Aid (38)	Assist Consumer Clean Room (36)	Create Repayment Schedule for Consumer (48)
8	Organise Consumer Belongings (26)	Outing with Consumers (56)	Assist Consumer Clean Room (38)	Create Repayment Schedule for Consumer (34)	Attend GP Appointment with Consumer (48)
9	Attend GP Appointment with Consumer (25)	Applications to JD, DoH, DSP (48)	Create Repayment Schedule for Consumer (33)	Supervise Consumer Bathing (27)	Groups (44)
10	Supervise Consumer Bathing (24)	Create Food Diary Template (44)	Financial Management Order Hearing (32)	Organise Consumer Belongings (27)	Assist Consumer with Legal Aid (39)

Table 27: Top 10 psychiatry activities as perceived by self and others

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=32)%**
1	Medication Prescribing (82)	Medication Prescribing (88)	Medication Prescribing (90)	Medication Review (93)	Medication Prescribing (88)
2	Medication Review (81)	Medication Review (80)	Medication Review (90)	Pathology Requests (93)	Pathology Requests (83)
3	Pathology Requests (79)	Pathology Requests (80)	Review Medical/Blood Results (89)	Review Medical/Blood Results (91)	Medication Review (81)
4	Review of Medical/Blood Results (76)	Review of Medical/Blood Results (76)	Pathology Requests (89)	Medication Prescribing (91)	Review of Medical/Blood Results (66)
5	Patient Medical Assessment (62)	Medical Patient Assessment (64)	Patient Medical Assessment (82)	Patient Medical Assessment (84)	Patient Medical Assessment (63)
6	Legal Activity (MHA) Schedules (60)	Psychiatry Review in Home with Registrar (52)	Legal Activity (MHA) Schedules (70)	ccCHIP Referral Form Completion (66)	Psychiatry Review in Home with Registrar (59)
7	Psychiatry Review in Home with Registrar (56)	Administer PRN Medication (48)	Clozapine Clinic (69)	Legal Activity (MHA) Schedules (66)	ccCHIP Referral Form Completion (57)
8	ccCHIP Referral (51)	Clozapine Clinic (48)	Liaise with Pharmacy (59)	Clozapine Clinic (55)	Legal Activity (MHA) Schedules (56)
9	Liaise with Pharmacy (48)	Give Medication Oral And IMI (48)	Psychiatry Review in Home with Registrar (52)	Liaise with Pharmacy (52)	Liaise with Pharmacy (51)
10	CTO Hearing (42)	Liaise with Pharmacy (48)	Psychological Therapy (51)	Complete CTO (43)	Medication Supervision (47)

Table 28: Top 10 psychology activities as perceived by self and others

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=25)%**
1	Psychological Therapy (51)	Psychological Therapy (84)	DBT Group (61)	Psychological Therapy (77)	DBT Group (78)
2	DBT Group (48)	DBT Group (60)	DBT Consultation (56)	DBT Group (66)	DBT Consultation (72)
3	DBT Consultation (46)	Phone Counselling (49)	Psychological Therapy (54)	Individual Therapy (66)	Psychological Therapy (66)
4	Individual Therapy (27)	DBT Consultation (48)	Individual Therapy (46)	DBT Consultation (66)	Individual Therapy (59)
5	Psychoeducation (25)	Groups (36)	Groups (25)	Counselling (39)	Counselling (38)
6	Counselling (21)	Individual Therapy (24)	Attend GP Appointment with Consumer (20)	Phone Counselling (34)	Breach CTO (35)
7	Phone Counselling (20)	Search for Consumer in Community (24)	Outing with Consumers (20)	Mental Health Assessment (32)	Phone Counselling (34)
8	Outing with Consumers (17)	Assist Consumer with Legal Aid (20)	Mental State Examination (MSE)	Mental State Examination (30)	Attend GP Appointment with Consumer (32)
9	Write Support Letters (15)	Writing Support Letters (20)	Care Coordination (18)	Groups (25)	Mental Health Assessment (31)
10	Groups (15)	Care Coordination (20)	Report Writing (16)	Writing Support Letters (25)	Groups (31)

Table 29: Top 10 social work activities as perceived by self and others

	Disciplines				
Activity Number	**Nursing (n=154)%**	**Occupational Therapy (n=25)%**	**Psychiatry (n=61)%**	**Psychology (n=44)%**	**Social Work (n=32)%**
1	Create Repayment Schedule for Consumer (58)	Follow-up Housing/Other Forms (68)	Assist Consumer with Legal Aid (66)	Assist Consumer with Legal Aid (75)	Follow-up Housing/Other Forms (63)
2	Follow-Up Housing Forms (57)	Assist Consumer with Legal Aid (68)	Follow-up Housing/Other Forms (64)	Follow-up Housing/Other Forms (70)	Create Repayment Schedule for Consumer (61)
3	Financial Management Order Hearing (51)	Financial Management Order Hearing (52)	Applications JD, DoH, DSP (62)	Create Repayment Schedule for Consumer (68)	Applications JD, DoH, DSP (59)
4	Application JD, DoH, DSP (50)	Create Repayment Schedule for Consumer (52)	Financial Management Hearing Order (59)	Attend GP Appointment with Consumer (61)	Financial Management Order Hearing (59)
5	Assist Consumer with Legal Aid (49)	Assist Consumer Clean Room (40)	Create Repayment Schedule for Consumer (59)	Organise Consumer Belongings (59)	Assist Consumer with Legal Aid (59)
6	Assist Consumer Clean Room (44)	Writing Support Letters (40)	Outing with Consumers (49)	Applications JD, DoH, DSP (55)	Organise Consumer Belongings (59)
7	Visit Burwood Respite (41)	Outing with Consumers (40)	Assist Consumer with Shopping (48)	Financial Management Order Hearing (52)	Assist Consumer Clean Room (58)
8	Assist Consumer with Shopping (39)	Home Visits (40)	Organise Consumer Belongings (46)	Assist Consumer Clean Room (50)	Assist Consumer with Shopping (58)
9	Outing with Consumers (37)	Visit Burwood Respite (40)	Assist Consumer Cleaning Room (44)	Assist Consumer with Shopping 45)	DBT Group (53)
10	Organise Consumer Belongings (33)	Assist Consumer with Shopping (36)	Search for Consumer in Community (39)	Outing with Consumers (43)	Attend GP Appointment with Consumer (52)

Table 30: Strength of professional identity across work location and disciplines

		Disciplines							
Professional Identity Scale	**Statistic/ Level**	**Nursing (n=120)**	**Occupational Therapy (n=15)**	**Psychiatry (n=47)**	**Psychology (n=16)**	**Social Work (n=17)**	**All (n=215)**	**Test**	**P-Value**
Inpatient	Mean	4.00	4.53	4.71	4.65	4.63	4.58	Type 3 Cat	**0.73**
	SD	0 (0)	0.74	0.42	0.52	0.40	0.63		
		Nursing (n=26)	**Occupational Therapy (n=9)**	**Psychiatry (n=13)**	**Psychology (n=26)**	**Social Work (n=15)**	**All (n=89)**		
Community	Mean	4.22	4.61	4.22	4.57	4.56	4.48	Type 3 Cat	**0.69**
	SD	0 (0)	0.42	0.65	1.42	0.58	0.87		
		Nursing (n=154)	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**All (N=316)**		
Combined	Mean	4.56	4.54	4.62	4.48	4.40	4.54	Type 3 Cat	**0.69**
	SD	0.69	0.55	0.79	0.86	0.93	0.75		

The difference in strength of PI between disciplines while in the predicted direction was not statistically significant on inpatient units, community teams or across the mental health service.

Sub-question 3.1 Professional Identity

What is the Strength of Professional Identity of Each of the Five Disciplines?

On inpatient units, the average PIS scores for each discipline from lowest PIS score to highest PIS score were: Nursing (PIS= 4.00), Occupational Therapy (PIS= 4.53), Social work(PIS= 4.63), Psychology (PIS= 4.65) and Psychiatry (PIS= 4.71). A Type 3 test was performed to test significance between mean values of PIS for each discipline in the inpatient setting.

H_0 = The mean PIS for all disciplines is the same in the inpatient setting.

H_1 = The mean PIS for all disciplines is not the same in the inpatient setting.

Since the P-value (0.73) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Thus, it can be concluded there is no statistically significant difference in strength of professional identity between disciplines in the inpatient setting.

On community teams, the average PIS scores for each discipline from lowest PIS score to highest PIS score were: Nursing (PIS= 4.22), and Psychiatry (PIS= 4.22), Social work(PIS= 4.56), Psychology (PIS= 4.57) and Occupational Therapy (PIS= 4.61). A Type 3 test was performed to test significance between mean values of PIS for each discipline in the community setting.

H_0 = The mean PIS for all disciplines is the same in the community setting.

H_1 = The mean PIS for all disciplines is not the same in the community setting.

Since the P-value (0.69) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Thus, it can be concluded there is no statistically significant difference in strength of professional identity between disciplines in the community setting. Even though occupational therapists reported the highest average PIS score on strength of professional identity, it was not statistically significant.

Overall, the average PIS scores for each discipline from lowest PIS score to highest PIS score were: Social work(PIS= 4.40), Psychology (PIS= 4.48), Occupational Therapy (PIS= 4.54), Nursing (PIS= 4.58) and Psychiatry (PIS= 4.62). A Type 3 test was performed to test significance between mean values of PIS for each discipline across work locations.

H_0 = The mean PIS for all disciplines is the same across work locations.

H_1 = The mean PIS for all disciplines is not the same across work locations.

Since the P-value (0.69) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Thus, it can be concluded there is no statistically significant difference in strength of professional identity between disciplines. Even though psychiatrists reported the highest average PIS score on strength of professional identity, it was not statistically significant.

Of note, strength of professional identity was greater in the inpatient setting for psychiatry, psychology and social work while it was greater in the community setting for occupational therapy and nursing. The greatest difference in strength of professional identity between inpatient (PIS= 4.71) and community (PIS= 4.22) settings was for psychiatry.

Table 31: Perceptions of power across discipline

		Disciplines Perception of Power							
Discipline	**Statistic/Level**	**Nursing (n=154)**	**Occupational Therapy (n=25)**	**Psychiatry (n=61)**	**Psychology (n=44)**	**Social Work (n=32)**	**All (N=316)**	**Test**	**P-value**
Nurses	Mean	4.12	4.16	4.70	4.67	4.21	**4.32**	Type 3 Test	**0.02***
	SD	1.37	1.52	1.18	1.32	1.55	1.38		
Occupational Therapists	Mean	3.67	3.85	3.38	3.55	3.52	**3.60**	Type 3 Test	**0.66**
	SD	1.75	1.39	1.20	1.39	1.39	1.54		
Psychiatrists	Mean	4.48	4.96	4.66	5.31	4.93	**4.71**	Type 3 Test	**0.09****
	SD	2.01	1.62	1.62	1.57	1.73	1.83		
Psychologists	Mean	3.79	4.23	3.89	3.92	4.20	**3.90**	Type 3 Test	**0.61**
	SD	1.80	1.47	1.43	1.41	1.70	1.64		
Social Workers	Mean	3.67	3.79	3.80	3.69	3.67	**3.71**	Type 3 Test	**0.98**
	SD	1.83	1.31	1.52	1.33	1.48	1.63		

Sub-question 4.1 Power

What is the Interaction between Professional Identity, Discipline Specific Activities and Power?

Perceptions of Power across Disciplines shows that nurses perceived psychiatrists (μ=4.48) to have the most power, then nurses (μ= 4.12), psychologists (μ= 3.79), social workers (μ= 3.67) and occupational therapists (μ= 3.67).

A Type 3 test was performed to test significance between mean values of POW for nurses.

H_0 = The mean POW is the same.

H_1 = The mean POW is not the same.

Since the P-value (0.02) is less than the significance level (0.05), the null hypothesis can be rejected. The results showed at least one significant difference between disciplines in terms of their perception of the amount of power possessed by nurses.

Occupational therapists perceived psychiatrists (μ=4.96) to have the most power, then psychologists (μ= 4.23), nurses (μ= 4.16), occupational therapists (μ= 3.85) and social workers (μ= 3.79).

A Type 3 test was performed to test significance between mean values of POW for occupational therapists.

H_0 = The mean POW is the same.

H_1 = The mean POW is not the same.

Since the P-value (0.66) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference between disciplines in terms of their perception of the amount of power possessed by occupational therapists.

Psychiatrists perceived nurses (μ=4.70) to have the most power, then psychiatrists (μ= 4.66), psychologists (μ= 3.89), social workers (μ= 3.80) and occupational therapists (μ= 3.38).

A Type 3 test was performed to test significance between mean values of POW for psychiatrists.

H_0 = The mean POW is the same.

H_1 = The mean POW is not the same.

Since the P-value (0.009) is greater than the significance level (0.05), the null hypothesis cannot be rejected. There was no significant difference between disciplines in terms of their perception of how much power psychiatrists possessed.

Psychologists perceived psychiatrists (μ=5.31) to have the most power, then nurses (μ= 4.67), psychologists (μ= 3.92), social workers (μ= 3.69) and occupational therapists (μ= 3.55).

A Type 3 test was performed to test significance between mean values of POW for psychologists.

H_0 = The mean POW is the same.

H_1 = The mean POW is not the same.

Since the P-value (0.61) is greater than the significance level (0.05), the null hypothesis cannot be rejected. There was no significant difference between disciplines in their perception of how much power psychologists possessed.

Social Workers perceived psychiatrists (μ=4.93) to have the most power, then nurses (μ= 4.21), psychologists (μ= 4.20), social workers (μ= 3.67) and occupational therapists (μ= 3.53).

A Type 3 test was performed to test significance between mean values of POW for social workers.

H_0 = The mean POW is the same.

H_1 = The mean POW is not the same.

Since the P-value (0.98) is greater than the significance level (0.05), the null hypothesis cannot be rejected. There was no significant difference between disciplines in their perception of social workers power.

While nurses perceived they had the least amount of power, the other disciplines rated them as being second to psychiatrists in power. Occupational therapists were perceived to be the least powerful discipline overall.

Table 32 presents the relationships between discipline specific activity, strength of professional identity and power.

Table 32: Pearson's correlation coefficient – overall

Pearson Correlation Coefficients Prob > |r| under H0: Rho=0 Number of Observations 320				
	disact	**genact**	**PISSum**	**POWMean**
Disact DisAct	1.00000 320	-0.14039 0.0121 319	0.23044 <.0001 320	0.42170 <.0001 320
Genact GenAct	-0.14039 0.0121 319	1.00000 319	0.12063 0.0312 319	0.37146 <.0001 319
PISSum	0.23044 <.0001 320	0.12063 0.0312 319	1.00000 320	0.38179 <.0001 320
POWMean	0.42170 <.0001 320	0.37146 <.0001 319	0.38179 <.0001 320	1.00000 320

There was a statistically significant, positive correlation between discipline specific activity and strength of professional identity (r = 0.23, p= <.0001); a statistically significant positive correlation between discipline specific activity and power (r = 0.42, p=<.0001) and a statistically significant positive relationship between strength of professional identity and power (r =0.38, p= <.0001).

Both strength of professional identity and power increased when clinicians spent more time performing discipline specific activities. There was a positive relationship between strength of professional identity and power.

Table 33 presents the relationships between discipline specific activity, strength of professional identity and power for nurses.

Table 33: Pearson's correlation coefficient – nursing

Pearson Correlation Coefficients, n = 154 Prob > |r| under H0: Rho=0				
	disact	**genact**	**PISSum**	**POWMean**
Disact DisAct	1.00000	0.01214 0.8812	0.13574 0.0932	0.38435 <.0001
Genact GenAct	0.01214 0.8812	1.00000	0.11925 0.1407	0.37913 <.0001
PISSum	0.13574 0.0932	0.11925 0.1407	1.00000	0.30229 0.0001
POWMean	0.38435 <.0001	0.37913 <.0001	0.30229 0.0001	1.00000

For nurses there was not a statistically significant positive correlation between discipline specific activity and strength of professional identity (r=0.14, p=0.0932); there was a statistically significant positive correlation between discipline specific activity and power (r =0.38, p=<.0001) and there was a statistically significant positive relationship between strength of professional identity and power (r=0.30, p=0.0001).

For nurses there was no significant relationship between DSA and strength of professional identity. However, there was a positive relationship between DSA and power as well as strength of professional identity and power.

Table 34 presents the relationships between discipline specific activity, strength of professional identity and power for occupational therapists.

Table 34: Pearson's correlation coefficient – occupational therapy

Pearson Correlation Coefficients, n = 25 Prob > |r| under H0: Rho=0				
	disact	**genact**	**PISSum**	**POWMean**
Disact DisAct	1.00000	-0.61121 0.0012	0.18570 0.3741	0.50604 0.0099
Genact GenAct	-0.61121 0.0012	1.00000	-0.04060 0.8472	0.05864 0.7807
PISSum	0.18570 0.3741	-0.04060 0.8472	1.00000	0.10815 0.6068
POWMean	0.50604 0.0099	0.05864 0.7807	0.10815 0.6068	1.00000

For occupational therapists there was not a statistically significant positive correlation between discipline specific activity and strength of professional identity (r=0.18, p=0.374); there was a statistically significant positive correlation between discipline specific activity and power (r=0.51, p=0.001) and there was not a statistically significant positive relationship between strength of professional identity and power (r =0.12, p= <.606)

For occupational therapists, there was no significant relationship between DSA and strength of professional identity. There was a positive relationship between DSA and power. However, there was no statistically significant relationship between strength of professional identity and power.

Table 35 presents the relationships between discipline specific activity, strength of professional identity and power for psychiatrists.

Table 35: Pearson's correlation coefficient – psychiatry

Pearson Correlation Coefficients, n = 61 Prob > |r| under H0: Rho=0				
	disact	**genact**	**PISSum**	**POWMean**
Disact	1.00000	0.12014	0.26786	0.46394
DisAct		0.3564	0.0369	0.0002
Genact	0.12014	1.00000	0.16431	0.41255
GenAct	0.3564		0.2058	0.0010
PISSum	0.26786	0.16431	1.00000	0.40194
	0.0369	0.2058		0.0013
POWMean	0.46394	0.41255	0.40194	1.00000
	0.0002	0.0010	0.0013	

For psychiatrists there was a statistically significant positive correlation between discipline specific activity and strength of professional identity (r=0.27, p=0.0369); a statistically significant positive correlation between discipline specific activity and power (r=0.46, p=0.0002) and a statistically significant positive relationship between strength of professional identity and power (r=0.40, p= 0.0013).

For psychiatrists, there was a significant relationship between DSA and strength of professional identity, between DSA and power as well as strength of professional identity and power.

Table 36 presents the relationships between discipline specific activity, strength of professional identity and power for psychologists.

Table 36: Pearson's correlation coefficient – psychology

Pearson Correlation Coefficients, n = 44 Prob > |r| under H0: Rho=0				
	disact	**genact**	**PISSum**	**POWMean**
Disact DisAct	1.00000	-0.53328 0.0002	0.23827 0.1193	0.36206 0.0157
Genact GenAct	-0.53328 0.0002	1.00000	-0.01970 0.9053	0.42899 0.0041
PISSum	0.23827 0.1193	-0.01870 0.9053	1.00000	0.49671 0.0006
POWMean	0.36206 0.0157	0.42899 0.0041	0.49671 0.0006	1.00000

For psychologists there was not a statistically significant positive correlation between discipline specific activity and strength of professional identity (r=0.24, p=0.1193). There was a statistically significant positive correlation between discipline specific activity and power (r=0.36, p=0.0157) and there was a statistically significant positive relationship between strength of professional identity and power (r=0.50, p=0.0006).

For psychologists there was no significant relationship between DSA and strength of professional identity. However, there was a positive relationship between DSA and power and strength of professional identity and power.

Table 37 presents the relationships between discipline specific activity, strength of professional identity and power for social workers.

Table 37: Pearson's correlation coefficient – social work

Pearson Correlation Coefficients, n = 32 Prob > |r| under H0: Rho=0				
	disact	**genact**	**PISSum**	**POWMean**
Disact DisAct	1.00000	-0.31342 0.0807	0.36608 0.0393	0.51811 0.0024
Genact GenAct	-0.31342 0.0807	1.00000	0.21578 0.2356	0.47344 0.0062
PISSum	0.36608 0.0393	0.21578 0.2356	1.00000	0.55569 0.0010
POWMean	0.51811 0.0024	0.47344 0.0062	0.55569 0.0010	1.00000

For social workers there was a statistically significant positive correlation between discipline specific activity and strength of professional identity (r=0.37, p=0.0393); a statistically significant positive correlation between discipline specific activity and power (r=0.52, p=0.0024) and a statistically significant positive relationship between strength of professional identity and power (r =0.56, p= <.0010).

For social workers, there was a significant relationship between DSA and strength of professional identity, between DSA and power as well as strength of professional identity and power.

Hypothesis 1

The first hypothesis was strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.

Professional Identity (PIS) and Discipline Specific Activities (DSA) – Overall

Table 38 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities.

Table 38: Correlation of sum of professional identity scores (PIS) and discipline specific activities (DSA) - overall

Pearson Correlation Coefficients, N = 320 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.23044 <.0001
disact DisAct	0.23044 <.0001	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for the overall sample (N=320).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.230, n=320, p= <.0001. The relationship was statistically significant. Increases in strength of professional identity were correlated with increases in time spent on discipline specific activities.

There was a positive relationship between time spent on discipline specific activities and strength of professional identity.

Nursing

Table 39 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities for nurses.

Table 39: Correlation of sum of professional identity (PIS) and discipline specific activities (DSA) - Nursing

Pearson Correlation Coefficients, n = 154 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.13574 0.0932
disact DisAct	0.13574 0.0932	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for nurses (n=154).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (0.093) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Even though a very weak positive correlation was found between the two variables, r=0.136, n=154, p= 0.0932, the relationship was not statistically significant.

There was no relationship between time spent on discipline specific activities and strength of professional identity for nurses.

Occupational Therapy

Table 40 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities for occupational therapists.

Table 40: Correlation of sum of professional identity (PIS) and discipline specific activities (DSA) – occupational therapy

Pearson Correlation Coefficients, n = 25 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.18570 0.3741
disact DisAct	0.18570 0.3741	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for occupational therapists (n=25).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (0.374) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Even though a very weak positive correlation was found between the two variables two variables, r=0.186, n=25, p=0.374, the relationship was not statistically significant.

There was no relationship between time spent on discipline specific activities and strength of professional identity for occupational therapists.

Psychiatry

Table 41 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities for psychiatrists.

Table 41: Correlation of sum of professional identity (PIS) and discipline specific activities (DSA) – psychiatry

Pearson Correlation Coefficients, n = 61 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.26786 0.0369
disact DisAct	0.26786 0.0369	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for psychiatrists (n=61).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (<.037) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.268, n=61, p=0.037. The relationship was statistically significant. Increases in strength of professional identity were correlated with increases in time spent on discipline specific activities.

There was a positive relationship between time spent on discipline specific activities and strength of professional identity for psychiatrists.

Psychology

Table 42 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities for psychologists.

Table 42: Correlation of sum of professional identity (PIS) and discipline specific activities (DSA) – psychology

Pearson Correlation Coefficients, n = 44 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.23827
		0.1193
disact	0.23827	1.00000
DisAct	0.1193	

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for psychologists (n=44).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (0.119) is greater than the significance level (0.05), the null hypothesis cannot be rejected. Even though a very weak positive correlation was found between the two variables, r=0.238, n=44, p= 0.119, the relationship was not statistically significant.

There was no relationship between time spent on discipline specific activities and strength of professional identity for psychologists.

Social Work

Table 43 presents the results of the relationship between strength of professional identity and time spent on discipline specific activities for social workers.

Table 43: Correlation of sum of professional identity (PIS) and discipline specific activities (DSA) – social work

Pearson Correlation Coefficients, n = 32 Prob > |r| under H0: Rho=0		
	PISSum	**disact**
PISSum	1.00000	0.36608 0.0393
disact DisAct	0.36608 0.0393	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and time spent on discipline specific activities (DSA) for social workers (n=32).

H_0: There is no relationship between PIS and DSA.

H_1: There is a relationship between PIS and DSA.

Since the P-value (0.039) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.366, n=32, p= 0.039. The relationship was statistically significant. Increases in strength of professional identity were correlated with increases in time spent on discipline specific activities.

There was a positive relationship between time spent on discipline specific activities and strength of professional identity for social workers.

Hypothesis 2

The second hypothesis was strength of professional identity will have a positive relationship with power.

Professional Identity (PIS) and Power (POW) – Overall

Table 44 presents the results of the relationship between strength of professional identity and power.

Table 44: Correlation of sum of professional identity scores (PIS) and power (POW) - overall

Pearson Correlation Coefficients, N = 320 Prob > |r| under H0: Rho=0		
	PISSum	**POWN**
PISSum	1.00000	0.38179 <.0001
POWN	0.38179 <.0001	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for all participants (N=320).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.382, n=320, p=<.0001. Increases in strength of professional identity were correlated with increases in power.

There was a positive relationship between strength of professional identity and power.

Nursing

Table 45 presents the results of the relationship between strength of professional identity and power for nurses.

Table 45: Correlation of sum of professional identity scores (PIS) and power (POW) - nursing

Pearson Correlation Coefficients, n = 154 Prob > |r| under H0: Rho=0		
	PISSum	**POWN**
PISSum	1.00000	0.35935 <.0001
POWN	0.35935 <.0001	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for nurses (n=154).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (<.0001) is less than the significance level (0.05), the null hypothesis can be rejected. There was a statistically significant, weak positive correlation between the two variables, r=0.359, n=154, p=<.0001. Increases in strength of professional identity were correlated with increases in power.

There was a positive relationship between strength of professional identity and power for nurses.

Occupational Therapy

Table 46 presents the results of the relationship between strength of professional identity and power for occupational therapists.

Table 46: Correlation of sum of professional identity scores (PIS) and power (POW) – occupational therapy

Pearson Correlation Coefficients, n = 25 Prob > |r| under H0: Rho=0		
	PISSum	**POWOT**
PISSum	1.00000	0.06712 0.7499
POWOT	0.06712 0.7499	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for occupational therapists (n=25).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (0.750) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The relationship between the two variables was very weak, r=0.067, n=25, p= 0.745 and not statistically significant.

There was no relationship between strength of professional identity and power for occupational therapists.

Psychiatry

Table 47 presents the results of the relationship between strength of professional identity and power for psychiatrists.

Table 47: Correlation of sum of professional identity scores (PIS) and power (POW) – psychiatry

Pearson Correlation Coefficients, n = 61 Prob > |r| under H0: Rho=0		
	PISSum	**POWMD**
PISSum	1.00000	0.34318 0.0068
POWMD	0.34318 0.0068	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for psychiatrists (n=61).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (0.007) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.343, n=61, p= 0.007. The relationship was statistically significant. Increases in strength of professional identity were correlated with increases in power.

There was a positive relationship between strength of professional identity and power for psychiatrists.

Psychology

Table 48 presents the results of the relationship between strength of professional identity and power for psychologists.

Table 48: Correlation of sum of professional identity scores (PIS) and power (POW) – psychology

Pearson Correlation Coefficients, n = 44 Prob > |r| under H0: Rho=0		
	PISSum	**POWPY**
PISSum	1.00000	0.44405 0.0025
POWPY	0.44405 0.0025	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for psychologists (n=44).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (0.003) is less than the significance level (0.05), the null hypothesis can be rejected. There was a weak positive correlation between the two variables, r=0.444, n=44, p= 0.003. The relationship was statistically significant. Increases in strength of professional identity were correlated with increases in power.

There was a positive relationship between strength of professional identity and power for psychologists.

Social Work

Table 49 presents the results of the relationship between strength of professional identity and power for social workers.

Table 49: Correlation of sum of professional identity scores (PIS) and power (POW) – social work

Pearson Correlation Coefficients, n = 32 Prob > |r| under H0: Rho=0		
	PISSum	**POWSW**
PISSum	1.00000	0.55872 0.0009
POWSW	0.55872 0.0009	1.00000

A Pearson Product-moment correlation coefficient was computed to assess the relationship between Strength of Professional Identity (PIS) and Power (POW) for social workers (n=32).

H_0: There is no relationship between PIS and POW.

H_1: There is a relationship between PIS and POW.

Since the P-value (0.001) is less than the significance level (0.05), the null hypothesis can be rejected. There was a statistically significant, moderate positive correlation between the two variables, r=0.559, n=32, p=0.001. Increases in strength of professional identity were correlated with increases in power.

There was a positive relationship between strength of professional identity and power for social workers.

Hypothesis 3

The third hypothesis was there would be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.

A regression analysis was performed to determine the difference between the groups. A p-value for F test for the difference in the means of the groups was determined and presented (see Tables 50-55).

Difference in Strength of Professional Identity between Inpatient and Community Staff – Overall

Table 50 shows whether there is a statistically significant difference in strength of professional identity and power between staff on inpatient units or community teams.

Table 50: Difference in strength of professional identity and power between inpatient and community staff – overall

Variable	Statistic/ Level	Inpatient n=216	Community n=90	Overall N=306	Test	P-value
Sum of PIS	Mean	45.77	44.80	45.48	Type 3 Test	**0.28**
	SD	6.34	8.65	7.10		
Mean of POWQ	Mean	4.11	3.98	4.07	Type 3 Test	**0.46**
	SD	1.32	1.53	1.38		

A Type 3 test was performed to test significance between mean values of PIS for inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.28) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in strength of professional identity (p=0.28) between inpatient staff (n=216) and community staff (n=90).

A Type 3 test was performed to test significance between mean values of POW for inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.46) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power (p=0.46) between inpatient staff (n=216) and community (n=90) staff.

There was no significant difference in strength of professional identity or power between all inpatient and community staff.

Nursing

Table 51 shows whether there is a statistically significant difference in strength of professional identity and power between nursing staff on inpatient units or community teams.

Table 51: Difference in strength of professional identity and power between inpatient and community nursing

Variable	Statistic/ Level	Inpatient n=120	Community n=26	Overall n=146	Test	P-value
Sum of PIS	Mean	48.61	45.31	45.61	Type 3 Test	**0.40**
	SD	3.97	7.43	6.86		
Mean of POWQ	Mean	3.29	4.01	3.95	Type 3 Test	**0.43**
	SD	2.02	1.51	1.56		

A Type 3 test was performed to test significance between mean values of PIS between nurses in inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.40) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in strength of professional identity between inpatient (n=216) and community (n=90) nurses.

A Type 3 test was performed to test significance between mean values of POW between nurses in inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.43) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power between inpatient (n=216) and community (n=90) nurses.

There was no significant difference in strength of professional identity or power between inpatient and community nurses.

Occupational Therapy

Table 52 shows whether there is a statistically significant difference in strength of professional identity and power between nursing staff on inpatient units or community teams.

Table 52: Difference in strength of professional identity and power between inpatient and community occupational therapists

Variable	Statistic/ Level	Inpatient n=15	Community n=9	Overall n=24	Test	P-value
Sum of PIS	Mean	48.89	47.11	45.42	Type 3 Test	**0.08**
	SD	0 (0)	4.24	5.52		
Mean of POW	Mean	5.15	4.54	4.20	Type 3 Test	**0.16**
	SD	0 (0)	0.395	1.37		

A Type 3 test was performed to test significance between mean values of PIS between occupational therapists in inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.08) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in strength of professional identity between inpatient (n=15) and community (n=9) occupational therapists.

A Type 3 test was performed to test significance between mean values of POW between occupational therapists in inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.16) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power between inpatient (n=15) and community (n=9) occupational therapists.

There was no significant difference in strength of professional identity or power between inpatient and community occupational therapists.

Psychiatry

Table 53 shows whether there is a statistically significant difference in strength of professional identity and power between psychiatrists on inpatient units or community teams.

Table 53: Difference in strength of professional identity and power between inpatient and community psychiatrists.

Variable	Statistic/ Level	Inpatient n=47	Community n=13	Overall n=60	Test	P-value
Sum of PIS	Mean	41.11	46.48	46.23	Type 3 Test	**0.78**
	SD	0 (0)	5.28	7.89		
Mean of POW	Mean	4.93	4.06	4.08	Type 3 Test	**0.79**
	SD	0 (0)	1.20	1.23		

A Type 3 test was performed to test significance between mean values of PIS between psychiatrists in inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.78) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in strength of professional identity between inpatient (n=47) and community (n=13) psychiatrists.

A Type 3 test was performed to test significance between mean values of POW between psychiatrists in inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.79) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power between inpatient (n=47) and community (n=13) psychiatrists.

There was no significant difference in strength of professional identity or power between inpatient and community psychiatrists.

Psychology

Table 54 shows whether there is a statistically significant difference in strength of professional identity and power between psychologists on inpatient units or community teams.

Table 54: Difference in strength of professional identity and power between inpatient and community psychologists

Variable	Statistic/ Level	Inpatient n=16	Community n=26	Overall n=42	Test	P-value
Sum of PIS	Mean	22.22	46.32	44.77	Type 3 Test	**0.0002**
	SD	31.42	4.051	8.55		
Mean of POW	Mean	2.49	4.49	4.23	Type 3 Test	**0.07**
	SD	3.52	0.553	1.18		

A Type 3 test was performed to test significance between mean values of PIS between psychologists in inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.0002) is less than the significance level (0.05), the null hypothesis can be rejected. The results showed a significant difference in strength of professional identity between inpatient (n=16) and community (n=26) psychologists.

A Type 3 test was performed to test significance between mean values of POW between psychologists in inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.07) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power between inpatient (n=16) and community (n=26) psychologists.

There was a significant difference in strength of professional identity but not power between inpatient and community psychologists.

Social Work

Table 55 shows whether there is a statistically significant difference in strength of professional identity and power between social workers on inpatient units or community teams.

Table 55: Difference in strength of professional identity and power between inpatient and community social workers

Variable	Statistic/ Level	Inpatient n=17	Community n=15	Overall n=33	Test	P-value
Sum of PIS	Mean	45.62	42.22	44.03	Type 3 Cat	**0.31**
	SD	3.30	13.11	9.29		
Mean of POW	Mean	4.23	3.97	4.11	Type 3 Cat	**0.61**
	SD	1.21	1.69	1.43		

A Type 3 test was performed to test significance between mean values of PIS between social workers in inpatient and community settings.

H_0 = The mean PIS is the same across work locations.

H_1 = The mean PIS is not the same across work locations.

Since the P-value (0.31) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in strength of professional identity between inpatient (n=17) and community (n=15) social workers.

A Type 3 test was performed to test significance between mean values of POW between social workers in inpatient and community settings.

H_0 = The mean POW is the same across work locations.

H_1 = The mean POW is not the same across work locations.

Since the P-value (0.61) is greater than the significance level (0.05), the null hypothesis cannot be rejected. The results showed no significant difference in power between inpatient (n=17) and community (n=15) social workers.

There was no significant difference in strength of professional identity or power between inpatient and community social workers.

Appendix 28 Factor Analyses PIS & POWQ

Table 1: Factor analysis of the Professional Identity Scale

Correlation Matrix									
		PISa	PISb	PISc	PISd	PISe	PISf	PISg	PISh	PISi
Correlation	PISa	1.000	.855	-.072	-.041	-.001	.654	.659	.590	.613
	PISb	.855	1.000	-.079	-.044	.000	.609	.687	.576	.630
	PISc	-.072	-.079	1.000	.768	.699	-.224	-.230	-.173	-.157
	PISd	-.041	-.044	.768	1.000	.743	-.218	-.212	-.184	-.156
	PISe	-.001	.000	.699	.743	1.000	-.199	-.132	-.164	-.126
	PISf	.654	.609	-.224	-.218	-.199	1.000	.734	.722	.670
	PISg	.659	.687	-.230	-.212	-.132	.734	1.000	.712	.767
	PISh	.590	.576	-.173	-.184	-.164	.722	.712	1.000	.703
	PISi	.613	.630	-.157	-.156	-.126	.670	.767	.703	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.846
Bartlett's Test of Sphericity	Approx. Chi-Square	2137.340
	df	36
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
PISg	.879	
PISa	.863	
PISb	.861	
PISi	.847	
PISf	.839	
PISh	.824	
PISd		.917
PISe		.895
PISc		.894
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Table 2: POWER Nursing – factor analysis

Correlation Matrix												
		POWNa	POWNb	POWNc	POWNd	POWNe	POWNf	POWNg	POWNh	POWNi	POWNj	POWNk
Correlation	POWNa	1.000	.727	.624	.575	.600	.600	.615	.591	.316	.251	.280
	POWNb	.727	1.000	.667	.620	.618	.580	.634	.631	.338	.346	.335
	POWNc	.624	.667	1.000	.663	.851	.757	.762	.661	.320	.346	.343
	POWNd	.575	.620	.663	1.000	.680	.684	.700	.679	.231	.345	.368
	POWNe	.600	.618	.851	.680	1.000	.823	.777	.694	.316	.354	.375
	POWNf	.600	.580	.757	.684	.823	1.000	.777	.678	.298	.307	.326
	POWNg	.615	.634	.762	.700	.777	.777	1.000	.744	.300	.374	.366
	POWNh	.591	.631	.661	.679	.694	.678	.744	1.000	.317	.371	.412
	POWNi	.316	.338	.320	.231	.316	.298	.300	.317	1.000	-.026	.182
	POWNj	.251	.346	.346	.345	.354	.307	.374	.371	-.026	1.000	.557
	POWNk	.280	.335	.343	.368	.375	.326	.366	.412	.182	.557	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	2490.562
	df	55
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
POWNe	.851	
POWNc	.850	
POWNf	.840	
POWNg	.835	
POWNa	.780	
POWNh	.776	
POWNb	.775	
POWNd	.757	
POWNi	.533	
POWNj		.879
POWNk		.775
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Table 3: POWER Occupational Therapy – factor analysis

Correlation Matrix												
		POWOTa	POWOTb	POWOTc	POWOTd	POWOTe	POWOTf	POWOTg	POWOTh	POWOTi	POWOTj	POWOTk
Correlation	POWOTa	1.000	.867	.767	.772	.759	.770	.728	.726	.505	.422	.460
	POWOTb	.867	1.000	.761	.821	.727	.745	.713	.693	.474	.432	.471
	POWOTc	.767	.761	1.000	.769	.879	.825	.823	.766	.574	.495	.568
	POWOTd	.772	.821	.769	1.000	.744	.776	.738	.782	.532	.455	.488
	POWOTe	.759	.727	.879	.744	1.000	.858	.837	.761	.551	.496	.562
	POWOTf	.770	.745	.825	.776	.858	1.000	.858	.784	.556	.462	.534
	POWOTg	.728	.713	.823	.738	.837	.858	1.000	.837	.562	.514	.617
	POWOTh	.726	.693	.766	.782	.761	.784	.837	1.000	.574	.495	.556
	POWOTi	.505	.474	.574	.532	.551	.556	.562	.574	1.000	.190	.324
	POWOTj	.422	.432	.495	.455	.496	.462	.514	.495	.190	1.000	.803
	POWOTk	.460	.471	.568	.488	.562	.534	.617	.556	.324	.803	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.922
Bartlett's Test of Sphericity	Approx. Chi-Square	3753.928
	df	55
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
POWOTf	.855	
POWOTa	.849	
POWOTc	.840	
POWOTd	.838	
POWOTe	.830	
POWOTb	.830	
POWOTg	.808	.422
POWOTh	.803	
POWOTi	.722	
POWOTj		.927
POWOTk		.883
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Table 4: POWER Psychiatry – factor analysis

Correlation Matrix												
		POWMDa	POWMDb	POWMDc	POWMDd	POWMDe	POWMDf	POWMDg	POWMDh	POWMDi	POWMDj	POWMDk
Correlation	POWMDa	1.000	.897	.885	.849	.863	.864	.794	.809	.630	.485	.470
	POWMDb	.897	1.000	.898	.858	.874	.876	.812	.812	.643	.529	.543
	POWMDc	.885	.898	1.000	.892	.931	.917	.870	.852	.610	.524	.535
	POWMDd	.849	.858	.892	1.000	.898	.904	.852	.866	.587	.481	.489
	POWMDe	.863	.874	.931	.898	1.000	.950	.889	.858	.612	.534	.558
	POWMDf	.864	.876	.917	.904	.950	1.000	.891	.866	.629	.492	.520
	POWMDg	.794	.812	.870	.852	.889	.891	1.000	.830	.585	.491	.520
	POWMDh	.809	.812	.852	.866	.858	.866	.830	1.000	.540	.486	.513
	POWMDi	.630	.643	.610	.587	.612	.629	.585	.540	1.000	.161	.229
	POWMDj	.485	.529	.524	.481	.534	.492	.491	.486	.161	1.000	.781
	POWMDk	.470	.543	.535	.489	.558	.520	.520	.513	.229	.781	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.949
Bartlett's Test of Sphericity	Approx. Chi-Square	4829.857
	df	55
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
POWMDf	.902	
POWMDc	.886	
POWMDe	.882	
POWMDd	.881	
POWMDa	.875	
POWMDb	.862	
POWMDg	.847	
POWMDh	.832	
POWMDi	.790	
POWMDj		.910
POWMDk		.886
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Table 5: POWER Psychology – factor analysis

Correlation Matrix												
		POWPYa	POWPYb	POWPYc	POWPYd	POWPYe	POWPYf	POWPYg	POWPYh	POWPYi	POWPYj	POWPYk
Correlation	POWPYa	1.000	.889	.840	.812	.812	.827	.801	.785	.576	.456	.467
	POWPYb	.889	1.000	.864	.804	.836	.851	.823	.781	.604	.424	.453
	POWPYc	.840	.864	1.000	.840	.915	.882	.885	.799	.572	.511	.556
	POWPYd	.812	.804	.840	1.000	.851	.815	.853	.822	.554	.487	.512
	POWPYe	.812	.836	.915	.851	1.000	.889	.878	.812	.542	.518	.558
	POWPYf	.827	.851	.882	.815	.889	1.000	.881	.819	.561	.452	.503
	POWPYg	.801	.823	.885	.853	.878	.881	1.000	.868	.585	.525	.568
	POWPYh	.785	.781	.799	.822	.812	.819	.868	1.000	.557	.524	.531
	POWPYi	.576	.604	.572	.554	.542	.561	.585	.557	1.000	.112	.232
	POWPYj	.456	.424	.511	.487	.518	.452	.525	.524	.112	1.000	.834
	POWPYk	.467	.453	.556	.512	.558	.503	.568	.531	.232	.834	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.936
Bartlett's Test of Sphericity	Approx. Chi-Square	4409.058
	df	55
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
POWPYb	.892	
POWPYf	.876	
POWPYc	.865	
POWPYa	.864	
POWPYg	.855	
POWPYe	.850	
POWPYd	.840	
POWPYh	.813	
POWPYi	.773	
POWPYj		.933
POWPYk		.892
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Table 6: POWER Social work– factor analysis

Correlation Matrix												
		POWSWa	POWSWb	POWSWc	POWSWd	POWSWe	POWSWf	POWSWg	POWSWh	POWSWi	POWSWj	POWSWk
Correlation	POWSWa	1.000	.880	.844	.812	.826	.846	.794	.762	.518	.450	.437
	POWSWb	.880	1.000	.830	.820	.794	.826	.797	.752	.517	.468	.447
	POWSWc	.844	.830	1.000	.818	.905	.876	.835	.742	.550	.454	.486
	POWSWd	.812	.820	.818	1.000	.827	.842	.825	.811	.540	.435	.430
	POWSWe	.826	.794	.905	.827	1.000	.883	.866	.762	.551	.474	.515
	POWSWf	.846	.826	.876	.842	.883	1.000	.875	.794	.548	.461	.489
	POWSWg	.794	.797	.835	.825	.866	.875	1.000	.843	.563	.517	.511
	POWSWh	.762	.752	.742	.811	.762	.794	.843	1.000	.572	.474	.482
	POWSWi	.518	.517	.550	.540	.551	.548	.563	.572	1.000	.170	.248
	POWSWj	.450	.468	.454	.435	.474	.461	.517	.474	.170	1.000	.837
	POWSWk	.437	.447	.486	.430	.515	.489	.511	.482	.248	.837	1.000

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.929
Bartlett's Test of Sphericity	Approx. Chi-Square	4165.335
	df	55
	Sig.	.000

Rotated Component Matrix[a]		
	Component	
	1	2
POWSWf	.889	
POWSWc	.879	
POWSWd	.878	
POWSWa	.872	
POWSWe	.871	
POWSWg	.860	
POWSWb	.857	
POWSWh	.822	
POWSWi	.709	
POWSWj		.931
POWSWk		.911
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Appendix 29 Summary of Hypotheses Tested

The Null Hypothesis – Question 1	**Accepted/ Rejected**
The mean DSA for all disciplines is the same.	Rejected
The mean GA for all disciplines is the same.	Rejected
The mean DSA for all disciplines is the same on inpatient units	Rejected
The mean GA for all disciplines is the same on inpatient units.	Accepted
The mean DSA for all disciplines is the same on community teams.	Rejected
The mean GA for all disciplines is the same on community teams.	Accepted
The mean DSA is the same in all work settings.	Rejected
The mean GA is the same in all work settings.	Rejected
The mean difference between DSA and GA for nurses is zero.	Rejected
The mean difference between DSA and GA for nurses on inpatient units is zero.	Accepted
The mean difference between DSA and GA for nurses on community teams is zero.	Rejected
The mean difference between DSA and GA for occupational therapists is zero.	Accepted
The mean difference between DSA and GA for occupational therapists on inpatient units is zero.	Rejected
The mean difference between DSA and GA for occupational therapists on community teams is zero.	Rejected
The mean difference between DSA and GA for psychiatrists is zero.	Rejected
The mean difference between DSA and GA for psychiatrists on inpatient units is zero.	Rejected
The mean difference between DSA and GA for psychiatrists on community teams is zero.	Rejected
The mean difference between DSA and GA for psychologists is zero.	Rejected
The mean difference between DSA and GA for psychologists on inpatient units is zero.	Rejected
The mean difference between DSA and GA for psychologists on community teams is zero	Rejected
The mean difference between DSA and GA for social workers is zero.	Accepted
The mean difference between DSA and GA for social workers on inpatient units is zero.	Rejected
The mean difference between DSA and GA for social workers on community teams is zero.	Accepted

*Statistically significant findings are highlighted in grey.

The Null Hypothesis – Question 3	**Accepted/ Rejected**
The mean PIS for all disciplines is the same in the inpatient setting.	Accepted
The mean PIS for all disciplines is the same in the community setting.	Accepted
The mean PIS for all disciplines is the same across work locations.	Accepted
The mean DSA for all disciplines is the same in the inpatient setting.	Rejected
The mean DSA for all disciplines is the same in the community setting.	Rejected
The mean DSA for all disciplines is the same.	Rejected

*Statistically significant findings are highlighted in grey.

The Null Hypothesis – Question 4	**Accepted/ Rejected**
The mean POW is the same for nurses.	Rejected
The mean POW is the same for occupational therapists.	Accepted
The mean POW is the same for psychiatrists.	Accepted
The mean POW is the same for psychologists.	Accepted
The mean POW is the same for social workers.	Accepted
Hypothesis 1: Strength of professional identity will have a positive relationship with greater proportion of time spent engaged in discipline specific activities.	
There is no relationship between PIS and DSA overall.	Rejected
There is no relationship between PIS and DSA for nurses.	Accepted
There is no relationship between PIS and DSA for occupational therapists.	Accepted
There is no relationship between PIS and DSA for psychiatrists.	Rejected
There is no relationship between PIS and DSA for psychologists.	Accepted
There is no relationship between PIS and DSA for social workers.	Rejected
Hypothesis 2: Strength of professional identity will have a positive relationship with power.	
There is no relationship between PIS and POW overall.	Rejected
There is no relationship between PIS and POW for nurses.	Rejected
There is no relationship between PIS and POW for occupational therapists.	Accepted
There is no relationship between PIS and POW for psychiatrists.	Rejected
There is no relationship between PIS and POW for psychologists.	Rejected
There is no relationship between PIS and POW for social workers.	Rejected
Hypothesis 3: There will be a significant difference in strength of professional identity between inpatient and community staff across the five disciplines.	
The mean PIS is the same across work locations.	Accepted
The mean POW is the same across work locations.	Accepted
The mean PIS is the same across work locations for nurses.	Accepted
The mean POW is the same across work locations for nurses.	Accepted

*Statistically significant findings are highlighted in grey.

The mean PIS is the same across work locations for occupational therapists.	Accepted
The mean POW is the same across work locations for occupational therapists.	Accepted
The mean PIS is the same across work locations for psychiatrists.	Accepted
The mean POW is the same across work locations for psychiatrists.	Accepted
The mean PIS is the same across work locations for psychologists.	Rejected
The mean POW is the same across work locations for psychologists.	Accepted
The mean PIS is the same across work locations for social workers.	Accepted
The mean POW is the same across work locations for social workers.	Accepted

*Statistically significant findings are highlighted in grey.

Appendix 30 Definition of Codes

Codes	Definition of Codes
Clinical Activities	Can be both GA and DSA but in this context refers to DSA.
Discipline Specific Activities	Clinical activities performed by each of the professional groups.
Professional Identity	Linked to DSA and maintaining boundaries around these activities. Also linked to power and standing.
Least Similar	Low vertical and horizontal substitution between disciplines. Impermeable boundaries.
Multidisciplinary	Teams which use a combination of GA and DSA to meet consumer needs.
Non-Clinical Activities	Generic activities such as eMR, mandatory training, completion of MHOAT modules including administrative, planning, meetings,
Generic Activities and Crossover	Clinical activities that are performed by any of the disciplines –crossover and genericisation of certain activities e.g. counselling, MSEs, risk assessment,
A Task Oriented Focus	Focus is on generic activities e.g. eMR, mandatory training, completion of MHOAT modules
Similarities between Professional Groups	Blurring of boundaries between disciplines – high vertical and horizontal substitution. Permeable boundaries. Faultlines.
Role Differentiation	Defined by activities (GA and DSA) performed. Who does what? Who owns what? Domains and scope of practice.
Tasks not Intervention Focused	Tope 10 activities performed by clinicians daily- not intervention focused.
Role Clarity and Understanding the Role of Other Dsiciplines	Blurring of boundaries – high vertical and horizontal substitution. Permeable boundaries**.** Faultlines
Blurred Boundaries	Factors contributing to blurred boundaries.
Individual Professional Characteristics contributing to Blurred	Blurring of boundaries between disciplines – high vertical and horizontal substitution. Permeable boundaries. Faultlines.

Codes	Definition of Codes
Boundaries	
Best use of Skills	Linked to DSA and how to meet consumer needs currently not met.
Leadership	Linked with perceptions of power enjoyed by a particular discipline. Expectation of taking on a leadership role by a particular discipline.
Authority	Linked with perceptions of power enjoyed by a particular discipline. Does not refer to individual power.
Power – Individual and Collective	Linked with perceptions of power enjoyed by a particular discipline. Does not refer to individual power.
Competition for Power	Blurring of boundaries – high horizontal substitution. Permeable boundaries. Faultlines.
Management	Barrier between management and clinicians.
Resourcing	Environmental factor or management strategy that can lead to blurring of boundaries – high horizontal substitution. Permeable boundaries. Faultlines.
Basic Consumer Needs are only being Met	GA and DSA currently provided that meet consumer needs, e.g. psychiatric, legal, accommodation.
Consumer Needs Unmet	DSA that are currently not provided e.g. Psychosocial and psychological.
Future Need and What needs to Change	GA and DSA that are currently not provided e.g. psychosocial and psychological.
Supporting Staff and Skill Development	Supporting staff to meet consumer needs.

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